


EXHIBIT 179 / of 100

The undersigned personally received documents related to the health safety and welfare affecting the children and staff of Clark County School District, hand delivered on Thursday May 13, 2021, at 2832 E. Flamingo, Las Vegas, Nevada 89121.

76 TOTAL PAGES



on behalf of Jesus F. Jara Christopher Bernier
Superintendent Jesus F. Jara's Chief of Staff

Christopher Bernier

Lisa Guzman, District A

Katie Williams, District B

Evelyn Garcia Morales, District C

Irene A. Cepeda, District D

Lola Brooks, District E

Danielle Ford, District F

Linda P. Cavazon, District G

Delivered 7 to Lisa

AFFIDAVIT

NOTICE OF DISCRIMINATION

You are not at liberty to violate my rights.

This establishment is **PROHIBITED BY LAW** from discriminating against an individual based on age, gender, ethnicity, medical condition or religious beliefs.

The U.S. Department of Justice, Civil Rights Division
is required to investigate complaints of discrimination.

DATE of Violation: 13 May 2021

NAME of Violator: Clark County School District

(If Identity is not given, provide physical description of violator):

Name of business: Clark County School District Board meeting

Location of Incident: 2832 E. Flamingo LV, NV 89121

Description of Incident: (attach additional sheets if needed): On Tuesday, May 11, 2021.

I phoned ahead if time to let the CCSD board address my statement that we have medical exemptions for masks and face shields. I received a callback at 12:15pm on Thursday May 13, to inform me that I needed to "be virtual." I replied that they are violating my civil rights, and I have every right to equal employment and opportunities, in person. She called me back at 1:55pm, informing me that I was permitted to attend in person.

When we arrived, we were separated from everyone else and put into a separate room. We were provided forms to fill out that also may violate our HIPAA

The above named violator of my Civil rights has been informed of U.S. Law and has willingly and rights.
knowingly refused my free and equal entry and access to all services and facilities as required by law.

This individual has been served a NOTICE OF DISCRIMINATION and has been informed that **CHARGES** may be filed in the Civil Rights Division of the Department of Justice and/or with the United States District Attorney and/or in the U.S. District Court for this willful violation of my U.S. Civil Rights.

Signature of injured party: Deana Villei Date: 13 May 2021

PRINT FULL NAME: Deana Villei

Signature of violator: _____ Date: _____

PRINT FULL NAME: _____

☒ CHECK here if violator refuses to sign NOTICE OF DISCRIMINATION

WITNESS (optional) Name: Christopher Bernier

Michael Nagy

PUBLIC ACCOMMODATIONS AND FACILITIES

Federal law prohibits privately owned facilities including retail establishments, medical offices and those that offer food, lodging, gasoline or entertainment to the public from discriminating on the basis of race, color, religion, medical condition, disability or national origin.

REQUIRED BY LAW:

The U.S. Department of Justice
Civil Rights Division

DOJ is required to investigate complaints of discrimination on the basis of race, color, national origin, sex, disability age and religion

RE: Illegal Mask Mandate enforced by you (personally) and Clark County School District

To Whom It May Concern, CCSD Superintendent, and School Board:

On behalf of my family and all minor children enrolled in Clark County School District (hereafter, "CCSD"), let this serve as a written, official notice that we do not consent to your illegal and discriminatory mandate of mask usage in school. As minor children are not yet considered adults, in the eyes of the law, I am standing in their stead. All consent, written and verbal, is only to be obtained from the parent/guardian, and not to be forced upon a minor child that does not have knowledge or maturity to advocate for themselves at this stage in their life. Use of a mask should be parental discretion, not mandated for every child. It is impossible to determine, without a full medical screening with a child wearing a mask in front of a qualified physician with specialized metrics and equipment, to determine health effects and risks.

Promoting the use of a non-FDA approved, Emergency Use Authorized mask, is unwarranted and illegal, as per Federal and State laws. This mandate is in direct conflict with Federal Code, Section 360bbb-36(1)(A)(ii)(I-III) AND Nevada Statute 630.400: practicing medicine without a license, as well as many others. I have attached them for your convenience.

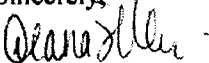
Misrepresentation of the use of a mask, as being intended for anti-microbial or antiviral protection, and/or misrepresenting masks for use as infection prevention or reduction, is a deceptive practice under the FTC. Please note, there is no waiver of liability under deceptive practices, even under a state of emergency. As such, forcing children to wear masks, or similarly forcing use any other non-FDA approved medical product without the child's (or the child's parental) consent, is illegal, immoral and goes against all civil liberties. I can provide multiple medical studies and legal information to support my statements, upon your request.

According to a study done by the NIH, health consequences of mask wearing include but are not limited to: hypoxemia, shortness of breath, acidosis, toxicity, inflammation, self-contamination, increased stress hormone levels, increased muscle tension, fear, anxiety, insomnia, fatigue, depression, hypertension, cardiovascular disease, cancer, diabetes, Alzheimer's, headaches, and decreased immune system protection. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7680614/>

I will not fail to take the maximum action permissible under the law against your organization, and against you personally, if your illegal, discriminatory, and bullying attempts to force innocent children to wear a mask does not cease immediately. I urge you to comply with Federal and State law and advise children they have a right to refuse or wear a mask, as a measure to prevent or reduce infection from COVID-19. Any other course of action on your part is contrary to the law and civil liberties. Please confirm no further pressure will be exerted upon students or staff of CCSD to follow your discriminatory mask mandate, and that our family will not face any bullying nor retaliatory disciplinary action. If such action is taken, please be aware that you will be sued to the full extent of the law, as your actions are in direct opposition to federal civil rights, state and local laws.

(Non Recompense Non Damaged All Rights Reserved)

Sincerely,



Deana Villei, mother of CCDS students

c/o 7835 S Rainbow Blvd, Suite 4-103, Las Vegas, Nevada [89139]

Attachments Annexed: Cease and Desist, Legal Notice, US Federal Laws, Nevada State Laws (14 total pages)

Parental Rights Document, Chapter 126 of NRS (1 page)

Clinical Article on Side Effects of Masks (42 pages)

Pfizer's mRNA Trial Document, excerpts p.67-70 (4 pages)

Dr Mercola: "Pregnant Women Should not get a Vaccine" (8 pages)

Microbiology + Infectious Diseases Research Article (3 pages) on COVID19 RNA vaccines

April 30, 2021: Salk Institute Findings re: spike protein and cardiovascular Disease (3 pages)

CEASE AND DESIST NOTICE TO SCHOOL BOARD, SUPERINTENDENT, TEACHERS AND ALL EMPLOYEES OF CCSD

ATTN: Superintendent, Trustee/Board Member, Teacher, and/or Employee of CCSD

RE: PLEASE Cease and Desist Mask Mandates, Social Distancing and Vaccinations in this jurisdiction

- You are under no lawful authority to require your employees or your students to wear a mask, stand six feet apart, or be vaccinated as a condition of entry or service.
- There is no statutory law that requires you, your employees or your students to wear a mask, stand six feet apart or be vaccinated.
- These are GUIDELINES of the State Dept of Health and local health boards. Any other ORDER is unlawful and must be challenged.
- **Preventing entry to your establishment based on someone's appearance (bare-faced) or health condition (unvaccinated) violates several laws under the authority of:**
 - **The Constitution of this State**
 - **The United States Constitution**
 - **Federal Civil Rights Law (Title 11, Section 2000)**
 - **This state's civil rights laws that prohibit discrimination**
- It is against the law to refuse entry to your establishment. You are restricting the free movement and right to education of an individual and engaging in false imprisonment/unlawful restraint/trespass on personal liberty. **You personally are liable for these crimes and your insurance company has been contacted.**
- You are in violation of several laws if you prohibit the entry of someone based on their appearance (i.e., bare-faced) or health status (i.e., not vaccinated).
- Declaring this as your "school policy" does not absolve you from your violation of the law.
- Your store policies are invalid and unenforceable if they are in violation of state and federal law.
- Orders, measures, policies, directives, protocols, guidelines or recommendations are not the same as statutory law. No governor, mayor, store owner or health officer can make a law. **You are in violation of the law if you restrict the entry of a student, teacher, employee, or parent into their place of work or education.**
- Violating the above-mentioned laws while concealing your identity with a face-covering may elevate the criminal charges against you for denying entry to any person in this jurisdiction.
- You personally can be held liable for criminal action, which may result in thousands of dollars of fines, and imprisonment.

- **ARREST WARNING:** Any and all violations of personal rights can be reported to authorities for immediate action. You are hereby notified that you personally can be held responsible for these violations of the law, regardless of school policies or health orders.
- **REMOVAL FROM OFFICE WARNING:** Violating Federal Laws, State Laws, US Constitution, Nevada Constitution, Nevada Revised Statutes, and American Disabilities Act is grounds for removal from office via Quo Warranto and/or Writ of Mandamus.

Here are your violations:

LEGAL NOTICE

To the Person Currently in Charge of Clark County School District

There is no statutory law that requires you, your employees or your customers to wear a mask, get their temperature taken or stay six feet apart.

There is no law that requires you to serve your customers outside or reduce the number of people in your business establishment.

In fact, if you require your customers to wear a mask or restrict their movement or entry if they are not wearing a mask, **you are at risk for violating several federal and state laws.**

Any violation of the following laws WILL BE REPORTED to the appropriate authorities. As the person responsible for this establishment, **YOU PERSONALLY** will be at risk for fines and imprisonment upon conviction of these crimes:

U.S. FEDERAL LAWS

1. U.S. Constitution, 1st Amendment, Right to Assemble, Right to Freedom of Speech, Right to Religious Expression

Requiring someone to wear a mask as a condition to assemble in your place of public accommodation is an infringement of the right protected under the U.S. Constitution, the highest law of the land. No law is valid or lawful that violates the Constitution. No health order, emergency order, state of emergency, municipal ordinance, or store policy may suspend or violate the Constitution, period.

2. U.S. Constitution, 4th Amendment, Right to Privacy

Forcing a person to wear a mask without their consent is a violation of the 4th Amendment. Further, gathering vital statistics such as taking one's temperature is a violation person's right to privacy. Violation of this protection will result in your actions being report to the U.S. Department of Justice, which is required by law to investigate Century Rights Violations. No law is valid or lawful that violates the Constitution. No health order, emergency order, state of emergency, municipal ordinance, or store policy may suspend or violate the Constitution, period.

3. U.S. Title 52, Century Rights Act of 1964: Unlawful to Discriminate in place of Public Accommodations

Your business establishment is legally defined as a place of "public accommodation" and as such you may not prohibit entry by discriminating against someone for their medical condition, disability or religious views. If someone is unable or unwilling to wear a mask for one of those reasons you may not prohibit their entry, nor may you file a charge of trespassing because of their legally protected status. **Just as you would not be able to deny entry to someone based on their skin color, you may not deny entry to someone based on their bare face.** Having someone else shop for them, or requiring curbside delivery is NOT a reasonable accommodation, as it denies the "full enjoyment and equal access to facilities, services and accommodations," as REQUIRED BY LAW.

4. U.S. Title 42, Section 12101: Unlawful to Deny Entry to Persons with Disability or perceived medical condition (ADA)

Your business establishment is legally defined as a place of "public accommodation" and as such you may not prohibit entry by discriminating against someone for their medical condition or disability. If someone is unable or unwilling to wear a mask for one of those reasons you may not prohibit their entry, nor may you file a charge of trespassing because of their legally protected status. **Just as you would not be able to deny entry to someone in a wheelchair, you may not deny entry to someone not wearing a mask.** Having someone else shop for them, or requiring curbside delivery is NOT a reasonable accommodation, as it denies the "full enjoyment and equal access to facilities, services and accommodations," as REQUIRED BY LAW.

5. U.S. Americans with Disabilities Act: Unlawful to Deny Entry to Persons with Disability or perceived medical condition

Your business establishment is legally defined as a place of "public accommodation" and as such you may not prohibit entry by discriminating against someone for their medical condition or disability.

If someone is unable or unwilling to wear a mask for one of those reasons you may not prohibit their entry, nor may you file a charge of trespassing because of their legally protected status. **Just as you would not be able to deny entry to someone in a wheelchair, you may not deny entry to someone not wearing a mask.** Having someone else shop for them, or requiring curbside delivery is NOT a reasonable accommodation, as it denies the "full enjoyment and equal access to facilities, services and accommodations," as **REQUIRED BY LAW.**

NEVADA STATE LAWS

1. Nevada Constitution, Article 1, Section 1

All people are by nature free and independent and have inalienable rights. Among these are enjoying and defending life and liberty, acquiring, possessing, and protecting property, and pursuing and obtaining safety, happiness, and privacy. Therefore, attempting to deny a customer from acquiring property by shopping at your business or to deny their access to services that they have the right to enjoy is unlawful and a violation of Constitutional liberties.

2. Nevada Constitution, Article 1, Section 9

Every person may freely speak. A law may not restrain or abridge livery of speech. (Muzzling one's face with a muzzle does not allow for one to freely speak, and it abridges freedom of speech.) Therefore, denying entry due to a person not wearing a mask is a violation of the Nevada Constitution,

3. Nevada Constitution, Article 1, Section 4

Free exercise and enjoyment of religious expression without discrimination. If covering one's face intrudes on the religious expression of an individual, that right to religious expression may not be denied.

4. Nevada Revised Statutes 630.400: Practicing medicine without a license

Requiring someone to wear a mask is a medical intervention. Unless you are a licensed medical professional, you have no authority to recommend such a practice. Further, a surgical mask is designated by the FDA as a "medical device". You have no legal authority responsibility or liability to require that of either your customers or your employees.

No "emergency order" supersedes established law. Any "health order" related to mask-wearing is unlawful and unenforceable by law.

Practicing medicine without a license is a felony in Nevada.

5. Nevada Revised Statutes 199.430: Impersonation of officer

You are not a law enforcement officer and have no authority to enforce any law or order. Impersonating a law enforcement officer is a crime in this state under **Nevada Revised Statutes 199.460**. This gross misdemeanor is punishable by up to one year in jail and a fine of up to \$2,000.

6. Nevada Revised Statutes 651.070: Free and Equal Access to Public Accommodations

Your business establishment is legally defined as a place of "public accommodation" and as such you may not prohibit entry by discriminating against someone for their medical condition, disability, or religious views. If someone is unable or unwilling to wear a mask for one of those reasons you may not prohibit their entry, nor may you file a charge of trespassing because of their legally protected status. **Just as you would not be able to deny entry to someone wearing a turban, you may not deny entry to someone not wearing a mask.** Having someone else shop for them, or requiring curbside delivery is NOT a reasonable accommodation, as it denies the "full enjoyment and equal access to facilities, services and accommodations," as REQUIRED BY LAW.

To file a civil rights complaint, visit

https://detr.nv.gov/Page/File_a_Charge_of_Discrimination or call 800-669- 4000 within 300 days of the violation date.

7. Nevada Revised Statutes 651.080: Deprivation of, interference with and punishment for exercising rights and privileges unlawful; penalty.

1. Any person is guilty of a misdemeanor who:

(a) Withholds, denies, deprives or attempts to withhold, deny or deprive any other person of any right or privilege secured by NRS 651.070 or 651.075;

(b) Intimidates, threatens, coerces or attempts to threaten, intimidate or coerce any other person for the purpose of interfering with any right or privilege secured by NRS 651.070 or 651.075; or

(c) Punishes or attempts to punish any other person for exercising or attempting to exercise any right or privilege secured by NRS 651.070 or 651.075.

2. A prosecution for violation of a local ordinance authorized by NRS 651.100 is a bar to any prosecution pursuant to this section.

8. Nevada Revised Statutes 233.010 - 2: Disabled have full and equal access

Individuals with disabilities or medical conditions have the same right as the general public in attaining full and equal access to all public accommodations and their advantages, facilities and privileges to places of public accommodation, amusement or resort; and to other places to which the general public is invited, including public modes of transportation, **private schools**, hotels, and public buildings, such as courthouses, **government buildings**.

9. Nevada Revised Statutes 205.0832: Theft

1. Except as otherwise provided in subsection 2, a person commits theft if, without lawful authority, the person knowingly:

(a) Controls any property of another person with the intent to deprive that person of the property.

(b) Converts, makes an unauthorized transfer of an interest in, or without authorization controls any property of another person, or uses the services or property of another person entrusted to him or her or placed in his or her possession for a limited, authorized period of determined or prescribed duration or for a limited use.

(c) Obtains real, personal or intangible property or the services of another person by a material misrepresentation with intent to deprive that person of the property or services. As used in this paragraph, "material misrepresentation" means the use of any pretense, or the making of any promise, representation or statement of present, past or future fact which is fraudulent and which, when used or made, is instrumental in causing the wrongful control or transfer of property or services. The pretense may be verbal or it may be a physical act.

(d) Comes into control of lost, mislaid or misdelivered property of another person under circumstances providing means of inquiry as to the true owner and appropriates that property to his or her own use or that of another person without reasonable efforts to notify the true owner.

(e) Controls property of another person knowing or having reason to know that the property was stolen.

(f) Obtains services, including, without limitation, audio or visual services, or parts, products or other items related to such services which the person knows or, in the case of audio or visual services, should have known are available only for compensation without paying or agreeing to pay compensation or diverts the services of another person to his or her own benefit or that of another person without lawful authority to do so.

(g) Takes, destroys, conceals or disposes of property in which another person has a security interest, with intent to defraud that person.

(h) Commits any act that is declared to be theft by a specific statute.

(i) Draws or passes a check, and in exchange obtains property or services, if the person knows that the check will not be paid when presented.

(j) Obtains gasoline or other fuel or automotive products which are available only for compensation without paying or agreeing to pay compensation.

2. A person who commits an act that is prohibited by subsection 1 which involves the repair of a vehicle has not committed theft unless, before the repair was made, the person received a written estimate of the cost of the repair.

Depriving someone the right to obtain property such as market goods or denying them of services is theft.

10. Nevada Revised Statutes 200.571: Harassment

A person is guilty of harassment if:

(a) Without lawful authority, the person knowingly threatens:

(1) To cause bodily injury in the future to the person threatened or to any other person;

(2) To cause physical damage to the property of another person;

(3) To subject the person threatened or any other person to physical confinement or restraint; or

(4) To do any act which is intended to substantially harm the person threatened or any other person with respect to his or her physical or mental health or safety; and

(b) The person by words or conduct places the person receiving the threat in reasonable fear that the threat will be carried out.

2. Except where the provisions of subsection 2 or 3 of NRS 200.575 are applicable, a person who is guilty of harassment:

(a) For the first offense, is guilty of a misdemeanor.

11. Nevada Revised Statutes 200.575: Stalking

A person who, without lawful authority, willfully or maliciously engages in a course of conduct that would cause a reasonable person to feel terrorized, frightened, intimidated, harassed or fearful for

the immediate safety of a family or household member, and that actually causes the victim to feel terrorized, frightened, intimidated, harassed or fearful for the immediate safety of a family or household member, commits the crime of stalking. Except where the provisions of subsection 2 or 3 are applicable, a person who commits the crime of stalking:

(a) For the first offense, is guilty of a misdemeanor.

(b) For any subsequent offense, is guilty of a gross misdemeanor.

12. Nevada Revised Statutes 200.460: False imprisonment

Attempting to prevent someone's entry to this establishment or to restrict, detain or confine their movement without their consent constitutes FALSE IMPRISONMENT. If you deny someone's entry to your place of public accommodation based on their medical condition or religious beliefs, you are at risk for charged with false imprisonment. A person convicted of false imprisonment shall pay all damages sustained by the person so imprisoned, and, except as otherwise provided in this section, is guilty of a gross misdemeanor.

13. Nevada Revised Statutes 203.010: Breach of peace

Every person who shall maliciously and willfully disturb the peace or quiet of any neighborhood or person or family by loud or unusual noises, or by tumultuous and offensive conduct, threatening, traducing, quarreling, challenging to fight, or fighting, shall be guilty of a misdemeanor.

14. Nevada Revised Statutes 200.471: Assault

As used in this section: (a) "Assault" means:

- (1) Unlawfully attempting to use physical force against another person; or
- (2) Intentionally placing another person in reasonable apprehension of immediate bodily

harm.

15. Nevada Revised Statutes 200.510: Libel

A libel is a malicious defamation, expressed by printing, writing, signs, pictures or the like, tending to blacken the memory of the dead, or to impeach the honesty, integrity, virtue, or reputation, or to

publish the natural defects of a living person or persons, or community of persons, or association of persons, and thereby to expose them to public hatred, contempt or ridicule.

Every person, whether the writer or publisher, convicted of the offense is guilty of a gross misdemeanor.

Any signage that harms the public perception of a protected class or any human being is a crime.

16. Nevada Revised Statutes 203.070: Rout and riot

If two or more persons shall meet to do an unlawful act, upon a common cause of quarrel, and make advances toward it, they commit a rout, and are guilty of a misdemeanor.

If two or more persons shall actually do an unlawful act of violence, either with or without a common cause of quarrel or even do a lawful act, in a violent, tumultuous and illegal manner, they commit a riot, and are guilty of a misdemeanor.

17. Nevada Revised Statutes 203.119: Commission of act in public building or area interfering with peaceful conduct of activities.

1. A person shall not commit any act in a public building or on the public grounds surrounding the building which interferes with the peaceful conduct of activities normally carried on in the building or on the grounds.

2. Any person whose conduct is prohibited by subsection 1 who refuses to leave the building or grounds upon request by the proper official is guilty of a misdemeanor.

3. Any person who aids, counsels or abets another to commit an act prohibited by subsection 2 is guilty of a misdemeanor.

4. For the purpose of this section:

(a) "Proper official" means the person or persons designated by the administrative officer or board in charge of the building.

(b) "Public building" means any building owned by:

(1) Any component of the Nevada System of Higher Education and used for any purpose related to the System.

(2) The State of Nevada or any county, city, school district or other political subdivision of the State and used for any public purpose.

Shopping or enjoying a place of public accommodation like a park or beach is a normal, legal activity and to prohibit or interfere with the enjoyment of such on the basis of the person not wearing a mask is a crime.

18. Nevada Revised Statutes 202.4415: Act of terrorism

"Act of terrorism" means any act that involves the use or attempted use of sabotage, coercion or violence which is intended to:

(a) Cause great bodily harm or death to the general population; or

(b) Cause substantial destruction, contamination or impairment of:

(1) Any building or infrastructure, communications, transportation, utilities or services; or

(2) Any natural resource or the environment.

2. As used in this section, "coercion" does not include an act of civil disobedience.

Forcing some one to mask is an act of terrorism to the person and to the mass population to which this is imposed upon.

NOTE: NO SCHOOL POLICY MAY VIOLATE ESTABLISHED LAW

Just as your place of business may not institute "Fist-fight Fridays" or encourage customers to engage in pickpocketing or require someone to snort a line of cocaine as a condition of entry, your "school policy" may not violate the established laws set forth in this notice.

No claim of an "emergency" or "executive orders" or "health orders" or "city ordinances" excuses you from violating the laws set forth in this notice.

Further, as a place of public accommodation (even as a private business) you have extended an irrevocable license (privilege) to the public to enter your establishment and you may not deny entry

based on race, religion, disability, or other protected characteristics.

THUS: By denying entry to a student, caregiver, or employee who is not wearing a mask for either medical or religious reasons, YOU ARE IN VIOLATION of at least five federal laws and 18 Nevada state laws, including:

US Constitution, 1st Amendment, 4th Amendment US Title 42, US Title 52
Nevada Constitution Article 1, sections 1, 4, 9

Nevada Revised Statutes 630.400: Practicing medicine without a license

Nevada Revised Statutes 199.430: Impersonation of officer

Nevada Revised Statutes 651.070: Free and Equal Access to Public Accommodations

Nevada Revised Statutes 651.080: Deprivation of, interference with and punishment for exercising rights and privileges unlawful; penalty.

Nevada Revised Statutes 233.010 - 2: Disabled have full and equal access Nevada

Revised Statutes 205.0832: Theft

Nevada Revised Statutes 200.571: Harassment

Nevada Revised Statutes 200.575: Stalking

Nevada Revised Statutes 200.460: False imprisonment Nevada Revised Statutes

203.010: Breach of peace Nevada Revised Statutes 200.471: Assault

Nevada Revised Statutes 200.510: Libel

Nevada Revised Statutes 203.070: Rout and riot

Nevada Revised Statutes 203.119: Commission of act in public building or area interfering with peaceful conduct of activities

Nevada Revised Statutes 202.4415: Act of terrorism

INITIAL_____.

Nevada Revised Statutes 207.200 Unlawful trespass upon land; warning against trespassing

1. Unless a greater penalty is provided pursuant to NRS 200.603, any person who, under circumstances not amounting to a burglary:

(a) Goes upon the land or into any building of another with intent to vex or annoy the owner or occupant thereof, or to commit any unlawful act; or

(b) Willfully goes or remains upon any land or in any building after having been warned by the owner or occupant thereof not to trespass,

**YOU ARE AT RISK FOR A CITIZEN'S ARREST, AS
AUTHORIZED UNDER NV REVISED STATUTES 177.126,
WITH LAW ENFORCEMENT BEING SUMMONED FOR YOUR
VIOLATIONS OF THE ABOVE LAWS.**

Nevada Revised Statutes 207.200 Unlawful trespass upon land; warning against trespassing

1. Unless a greater penalty is provided pursuant to NRS 200.603, any person who, under circumstances not amounting to a burglary:

(a) Goes upon the land or into any building of another with intent to vex or annoy the owner or occupant thereof, or to commit any unlawful act; or

(b) Willfully goes or remains upon any land or in any building after having been warned by the owner or occupant thereof not to trespass, is guilty of a misdemeanor. The meaning of this subsection is not limited by subsections 2 and 4.

2. A sufficient warning against trespassing, within the meaning of this section, is given by any of the following methods:

(a) If the land is used for agricultural purposes or for herding or grazing livestock, by painting with fluorescent orange paint:

(1) Not less than 50 square inches of the exterior portion of a structure or natural object or the top 12 inches of the exterior portion of a post, whether made of wood, metal or other material, at:

(I) Intervals of such a distance as is necessary to ensure that at least one such structure, natural object or post would be within the direct line of sight of a person standing next to another such structure, natural object or post, but at intervals of not more than 1,000 feet; and

(II) Each corner of the land, upon or near the boundary; and

(2) Each side of all gates, cattle guards and openings that are designed to allow human ingress to the area;

(b) If the land is not used in the manner specified in paragraph (a), by painting with fluorescent orange paint not less than 50 square inches of the exterior portion of a structure or natural object or the top 12 inches of the exterior portion of a post, whether made of wood, metal or other material, at:

(1) Intervals of such a distance as is necessary to ensure that at least one such structure, natural object or post would be within the direct line of sight of a person standing next to another such structure, natural object or post, but at intervals of not more than 200 feet; and

(2) Each corner of the land, upon or near the boundary; (c) Fencing the area; or

(d) By the owner or occupant of the land or building making an oral or written demand to any guest to vacate the land or building.

3. It is prima facie evidence of trespass for any person to be found on private or public property which is posted or fenced as provided in subsection 2 without lawful business with the owner or occupant of the property.

4. An entryman on land under the laws of the United States is an owner within the meaning of this section.

5. As used in this section:

(a) "Fence" means a barrier sufficient to indicate an intent to restrict the area to human ingress, including, but not limited to, a wall, hedge or chain link or wire mesh fence. The term does not include a barrier made of barbed wire.

(b) "Guest" means any person entertained or to whom hospitality is extended, including, but not limited to, any person who stays overnight. The term does not include a tenant as defined in NRS 118A.170.

Senate Bill No. 314--Senator Denis

CHAPTER.....

AN ACT relating to parentage; providing that the right of a parent to make decisions regarding the care, custody and management of his or her child is a fundamental right; and providing other matters properly relating thereto.

Legislative Counsel's Digest:

This bill provides that the liberty interest of a parent in the care, custody and management of his or her child is a fundamental right. This bill also provides that this fundamental right does not: (1) authorize a parent to engage in unlawful conduct or to abuse or neglect a child; or (2) prohibit courts, law enforcement officers or agencies which provide child welfare services from acting within their official capacity.

EXPLANATION - Matter in *bolded italics* is new, matter between brackets [*deleted material*] is material to be omitted

THE PEOPLE OF THE STATE OF NEVADA, REPRESENTED IN
SENATE AND ASSEMBLY, DO ENACT AS FOLLOWS:

Section 1. Chapter 126 of NRS is hereby amended by adding thereto a new section to read as follows:

1. *The liberty interest of a parent in the care, custody and management of the parent's child is a fundamental right.*

2. *Nothing in this section shall be construed to:*

(a) *Authorize a parent to engage in any unlawful conduct or to abuse or neglect a child in violation of the laws of this State.*

(b) *Prohibit courts, law enforcement officers or employees of an agency which provides child welfare services from acting in their official capacity within the scope of their authority.*

3. *Except as otherwise provided by specific statute, the provisions of this section apply to any statute, local ordinance or regulation and the implementation of such statute, local ordinance or regulation regardless of whether such statute, local ordinance or regulation was adopted or effective before, on or after October 1, 2013.*

4. *As used in this section, "agency which provides child welfare services" has the meaning ascribed to it in NRS 432B.030.*

20 ~~~~~ 13





Review

Is a Mask That Covers the Mouth and Nose Free from Undesirable Side Effects in Everyday Use and Free of Potential Hazards?

Kai Kisielinski ¹, Paul Giboni ², Andreas Prescher ³, Bernd Klosterhalfen ⁴, David Graessel ⁵, Stefan Funken ⁶, Oliver Kempfski ⁷ and Oliver Hirsch ^{8,*}

¹ Private Practice, 40212 Düsseldorf, Germany; kaikisielinski@yahoo.de

² Private Practice, 22763 Hamburg, Germany; pgiboni@gmx.de

³ Institute of Molecular and Cellular Anatomy (MOCA), Wendlingweg 2, 52074 Aachen, Germany; aprescher@ukaachen.de

⁴ Institute of Pathology, Dueren Hospital, Roonstrasse 30, 52351 Dueren, Germany; bernd.klosterhalfen@web.de

⁵ Institute of Neuroscience and Medicine, Forschungszentrum Jülich, 52425 Jülich, Germany; d.graessel@fz-juelich.de

⁶ Private Practice, 47803 Krefeld, Germany; dr_funken@colita.net

⁷ Institute of Neurosurgical Pathophysiology, University Medical Centre of the Johannes Gutenberg University of Mainz Langenbeckstr. 1, 55131 Mainz, Germany; oliver.kempfski@unimedizin-mainz.de

⁸ Department of Psychology, FOM University of Applied Sciences, 57078 Siegen, Germany

* Correspondence: oliver.hirsch@fom.de



Citation: Kisielinski, K.; Giboni, P.; Prescher, A.; Klosterhalfen, B.; Graessel, D.; Funken, S.; Kempfski, O.; Hirsch, O. Is a Mask That Covers the Mouth and Nose Free from Undesirable Side Effects in Everyday Use and Free of Potential Hazards? *Int. J. Environ. Res. Public Health* **2021**, *18*, 4344. <https://doi.org/10.3390/ijerph18084344>

Academic Editor: Paul B. Tchounwou

Received: 20 March 2021

Accepted: 16 April 2021

Published: 20 April 2021

Publisher's Note: MDPI stays neutral with regard to jurisdictional claims in published maps and institutional affiliations.



Copyright: © 2021 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

Abstract: Many countries introduced the requirement to wear masks in public spaces for containing SARS-CoV-2 making it commonplace in 2020. Up until now, there has been no comprehensive investigation as to the adverse health effects masks can cause. The aim was to find, test, evaluate and compile scientifically proven related side effects of wearing masks. For a quantitative evaluation, 44 mostly experimental studies were referenced, and for a substantive evaluation, 65 publications were found. The literature revealed relevant adverse effects of masks in numerous disciplines. In this paper, we refer to the psychological and physical deterioration as well as multiple symptoms described because of their consistent, recurrent and uniform presentation from different disciplines as a Mask-Induced Exhaustion Syndrome (MIES). We objectified evaluation evidenced changes in respiratory physiology of mask wearers with significant correlation of O₂ drop and fatigue ($p < 0.05$), a clustered co-occurrence of respiratory impairment and O₂ drop (67%), N95 mask and CO₂ rise (82%), N95 mask and O₂ drop (72%), N95 mask and headache (60%), respiratory impairment and temperature rise (88%), but also temperature rise and moisture (100%) under the masks. Extended mask-wearing by the general population could lead to relevant effects and consequences in many medical fields.

Keywords: personal protective equipment; masks; N95 face mask; surgical mask; risk; adverse effects; long-term adverse effects; contraindications; health risk assessment; hypercapnia; hypoxia; headache; dyspnea; physical exertion; MIES syndrome

1. Introduction

At the beginning of the spread of the novel pathogen SARS-CoV-2, it was necessary to make far-reaching decisions even without available explicit scientific data. The initial assumption was that the pandemic emergency measures were set in place to reduce the acute threat of the public health system effectively and swiftly.

In April 2020, the World Health Organization (WHO) recommended the use of masks only for symptomatic, ill individuals and health care workers and did not recommend its widespread use.

In June 2020, they changed this recommendation to endorse the general use of masks in, e.g., crowded places [1,2]. In a meta-analysis study commissioned by the WHO (evidence level Ia), no clear, scientifically graspable benefit of moderate or strong evidence was derived from wearing masks [3].

While maintaining a distance of at least one meter showed moderate evidence with regard to the spreading of SARS-CoV-2, only weak evidence at best could be found for masks alone in everyday use (non-medical setting) [3]. Another meta-analysis conducted in the same year confirmed the weak scientific evidence for masks [4].

Accordingly, the WHO did not recommend general or uncritical use of masks for the general population and expanded its risk and hazard list within just two months. While the April 2020 guideline highlighted the dangers of self-contamination, possible breathing difficulties and false sense of security, the June 2020 guideline found additional potential adverse effects such as headache, development of facial skin lesions, irritant dermatitis, acne or increased risk of contamination in public spaces due to improper mask disposal [1,2].

However, under pressure from increasing absolute numbers of positive SARS-CoV-2 tests, many prescribers further extended mask-wearing according to certain times and situations, always justified by the desire to limit the spread of the virus [5]. The media, numerous institutions and most of the population supported this approach.

Among the medical profession and scientists, the users and observers of medical devices, there have been simultaneous calls for a more nuanced approach [6–8]. While there has been a controversial scientific discussion worldwide about the benefits and risks of masks in public spaces, they became the new social appearance in everyday life in many countries at the same time.

Although there seems to be a consensus among the decision makers who have introduced mandatory masks that medical exemptions are warranted, it is ultimately the responsibility of individual clinicians to weigh up when to recommend exemption from mandatory masks. Physicians are in a conflict of interest concerning this matter. On the one hand, doctors have a leading role in supporting the authorities in the fight against a pandemic. On the other hand, doctors must, in accordance with the medical ethos, protect the interests, welfare and rights of their patient's third parties with the necessary care and in accordance with the recognized state of medical knowledge [9–11].

A careful risk-benefit analysis is becoming increasingly relevant for patients and their practitioners regarding the potential long-term effects of masks. The lack of knowledge of legal legitimacy on the one hand and of the medical scientific facts on the other is a reason for uncertainty among clinically active colleagues.

The aim of this paper is to provide a first, rapid, scientific presentation of the risks of general mandatory mask use by focusing on the possible adverse medical effects of masks, especially in certain diagnostic, patient and user groups.

2. Materials and Methods

The objective was to search for documented adverse effects and risks of different types of mouth-nose-covering masks. Of interest here were, on the one hand, readymade and self-manufactured fabric masks, including so-called community masks and, on the other hand medical, surgical and N95 masks (FFP2 masks).

Our approach of limiting the focus to negative effects seems surprising at first glance. However, such an approach helps to provide us with more information. This methodology is in line with the strategy of Villalonga-Olives and Kawachi, who also conducted a review exclusively on the negative effects [12].

For an analysis of the literature, we defined the risk of mouth-nose protection as the description of symptoms or the negative effects of masks. Reviews and expert presentations from which no measurable values could be extracted, but which clearly present the research situation and describe negative effects, also fulfill this criterion.

Additionally, we defined the quantifiable, negative effect of masks as the presentation of a measured, statistically significant change in a physiological parameter in a pathological direction ($p < 0.05$), a statistically significant detection of symptoms ($p < 0.05$) or the occurrence of symptoms in at least 50% of those examined in a sample ($n \geq 50\%$).

Up to and including 31 October 2020, we conducted a database search in PubMed/MEDLINE on scientific studies and publications on adverse effects and risks of different types of mouth–nose–covering masks according to the criteria mentioned above (see Figure 1: Review flowchart). Terms searched were “face masks”, “surgical mask” and “N95” in combination with the terms “risk” and “adverse effects” as well as “side effects”. The selection criteria of the papers were based on our above definition of risk and adverse effect of masks. Mainly English- and German-language publications of evidence levels I to III according to the recommendations of the Agency for Healthcare Research and Quality (AHRQ) that were not older than 20 years at the time of the review were considered. The evaluation also excluded level IV evidence, such as case reports and irrelevant letters to the editor that exclusively reflect opinions without scientific evidence.

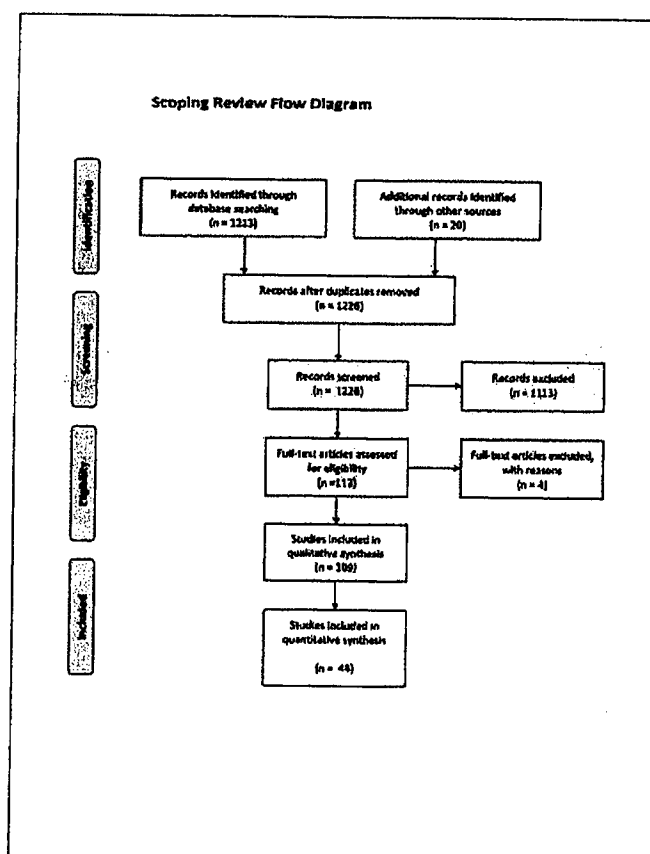


Figure 1. Scoping review flow diagram according to the PRISMA scheme.

After excluding 1113 papers that were irrelevant to the research question and did not meet the criteria mentioned (quantifiable, negative effects of masks, description of symptoms or the negative effects of masks), a total of 109 relevant publications were found for evaluation in the context of our scoping review (see Figure 1: Flow chart).

Sixty-five relevant publications concerning masks were considered being within the scope of the content-related evaluation. These included 14 reviews and 2 meta-analyses from the primary research. For the quantitative evaluation, 44 presentations of nega-

tive effects from the years 2004 to 2020 were eligible. Thirty-one of these studies were experimental (70%), and 13 studies were data collection studies in the sense of simple observational studies, especially in the dermatological field (30%). The observed study parameters and significant results from these 44 publications ($p < 0.05$ or $n \geq 50\%$) were compiled in an overall display (Figure 2). Based on this data, a correlation analysis of the observed mask effects was performed. This included a correlation calculation of the recorded symptoms and physiological changes (for nominally scaled, dichotomous variables according to Fisher using R, R Foundation for Statistical Computing, Vienna, Austria, version 4.0.2).

significantly measured mask-induced changes in scientific studies 2004–2020: • = $p < 0.05$ ■ = $n \geq 50\%$	Physical Risk	Respiratory Risk	Eye Risk	Ear Risk	Head Risk	Neck Risk	Temperature	Respiratory Function	Respiratory Rate	Heart Pressure	Heart Rate	Respiratory Impairment	Cholesterol & Triglycerides	Cholesterol	Glucose	Neurology	Psychological Effect	Decrease in Capacity	Men	Skin Irritation	Asthma	Headache	Visual Disorder	Flu Virus of Bacteria	Bacterial Concentration	Protein Concentration	Viral Concentration
Bader 2006	•	•	•																								
Bharilendu 2020	•	•	•																								
Butz 2006	•	•	•																								
Chughai 2019	•	•	•																								
Epaleh 2020	•	•	•																								
Fikenzler 2020	•	•	•																								
Foo 2006	•	•	•																								
Georgi 2020	•	•	•																								
Goh 2018	•	•	•																								
Heider 2020	•	•	•																								
Hus 2020	•	•	•																								
Jacobs 2006	•	•	•																								
Jagm 2016	•	•	•																								
Kao 2004	•	•	•																								
Korinek 2020	•	•	•																								
Kyung 2020	•	•	•																								
Lan 2020	•	•	•																								
Lee 2011	•	•	•																								
Li 2006	•	•	•																								
Lin 2006	•	•	•																								
Liu 2020	•	•	•																								
Luckman 2020	•	•	•																								
Luhnamjanyakul 2014	•	•	•																								
Makalak 2020	•	•	•																								
Ma 2020	•	•	•																								
Monalisa 2017	•	•	•																								
Ong 2020	•	•	•																								
Person 2016	•	•	•																								
Pilane 2020	•	•	•																								
Portari 2016	•	•	•																								
Prossa 2020	•	•	•																								
Ramirez 2020	•	•	•																								
Rebmann 2013	•	•	•																								
Roberge 2012	•	•	•																								
Roberge 2014	•	•	•																								
Roemer 2020	•	•	•																								
Scarsino 2020	•	•	•																								
Shenai 2012	•	•	•																								
Smani 2020	•	•	•																								
Szeplakowski 2020	•	•	•																								
Tchassien 2020	•	•	•																								
Tang 2015	•	•	•																								
Wong 2013	•	•	•																								
Zhuang 2018	•	•	•																								

Figure 2. Overview including all 44 considered studies with quantified, significant adverse effects of masks (black dots and black rectangles). Not all studies examined each mentioned parameter, as focused or subject-related questions were often in the foreground. Gray fields correspond to a lack of coverage in the primary studies, white fields represent measured effects. We found an often combination of significant chemical, physical, physiological parameters and complaints. Drowsiness summarizes the symptom for any qualitative neurological deficits described in the scientific literature examined.

In addition, another 64 publications with a neighboring range of topics were consulted in connection with the mask effects we found. These included declarations, guidelines

and legal principles. In order to expand the amount of data for the discussion, we proceeded according to the "snowball principle" by locating citations of selected papers in the bibliographies and including them where appropriate.

Since the findings from the topics presented for discussion were to an unexpected degree subject-related, we decided to divide the results according to the fields of medicine. Of course, there are overlaps between the respective fields, which we point out in detail.

3. Results

A total of 65 scientific papers on masks qualified for a purely content-based evaluation. These included 14 reviews and two meta-analyses.

Of the mathematically evaluable, groundbreaking 44 papers with significant negative mask effects ($p < 0.05$ or $n \geq 50\%$), 22 were published in 2020 (50%), and 22 were published before the COVID-19 pandemic. Of these 44 publications, 31 (70%) were of experimental nature, and the remainder were observational studies (30%). Most of the publications in question were English (98%). Thirty papers referred to surgical masks (68%), 30 publications related to N95 masks (68%), and only 10 studies pertained to fabric masks (23%).

Despite the differences between the primary studies, we were able to demonstrate a statistically significant correlation in the quantitative analysis between the negative side effects of blood-oxygen depletion and fatigue in mask wearers with $p = 0.0454$.

In addition, we found a mathematically grouped common appearance of statistically significant confirmed effects of masks in the primary studies ($p < 0.05$ and $n \geq 50\%$) as shown in Figure 2. In nine of the 11 scientific papers (82%), we found a combined onset of N95 respiratory protection and carbon dioxide rise when wearing a mask. We found a similar result for the decrease in oxygen saturation and respiratory impairment with synchronous evidence in six of the nine relevant studies (67%). N95 masks were associated with headaches in six of the 10 studies (60%). For oxygen deprivation under N95 respiratory protectors, we found a common occurrence in eight of 11 primary studies (72%). Skin temperature rise under masks was associated with fatigue in 50% (three out of six primary studies). The dual occurrence of the physical parameter temperature rise and respiratory impairment was found in seven of the eight studies (88%). A combined occurrence of the physical parameters temperature rise and humidity/moisture under the mask was found in 100% within six of six studies, with significant readings of these parameters (Figure 2).

The literature review confirms that relevant, undesired medical, organ and organ system-related phenomena accompanied by wearing masks occur in the fields of internal medicine (at least 11 publications, Section 3.2). The list covers neurology (seven publications, Section 3.3), psychology (more than 10 publications, Section 3.4), psychiatry (three publications, Section 3.5), gynecology (three publications, Section 3.6), dermatology (at least 10 publications, Section 3.7), ENT medicine (four publications, Section 3.8), dentistry (one publication, Section 3.8), sports medicine (four publications, Section 3.9), sociology (more than five publications, Section 3.10), occupational medicine (more than 14 publications, Section 3.11), microbiology (at least four publications, Section 3.12), epidemiology (more than 16 publications, Section 3.13), and pediatrics (four publications, Section 3.14) as well as environmental medicine (four publications, Section 3.15).

We will present the general physiological effects as a basis for all disciplines. This will be followed by a description of the results from the different medical fields of expertise and closing off with pediatrics the final paragraph.

3.1. General Physiological and Pathophysiological Effects for the Wearer

As early as 2005, an experimental dissertation (randomized crossover study) demonstrated that wearing surgical masks in healthy medical personnel (15 subjects, 18–40 years old) leads to measurable physical effects with elevated transcutaneous carbon dioxide values after 30 min [13]. The role of dead space volume and CO_2 retention as a cause of the significant change ($p < 0.05$) in blood gases on the way to hypercapnia, which was still

within the limits, was discussed in this article. Masks expand the natural dead space (nose, throat, trachea, bronchi) outwards and beyond the mouth and nose.

An experimental increase in the dead space volume during breathing increases carbon dioxide (CO_2) retention at rest and under exertion and correspondingly the carbon dioxide partial pressure $p\text{CO}_2$ in the blood ($p < 0.05$) [14].

As well as addressing the increased rebreathing of carbon dioxide (CO_2) due to the dead space, scientists also debate the influence of the increased breathing resistance when using masks [15–17].

According to the scientific data, mask wearers as a whole show a striking frequency of typical, measurable, physiological changes associated with masks.

In a recent intervention study conducted on eight subjects, measurements of the gas content for oxygen (measured in O_2 Vol%) and carbon dioxide (measured in CO_2 ppm) in the air under a mask showed a lower oxygen availability even at rest than without a mask. A Multi-Rae gas analyzer was used for the measurements (RaeSystems®) (Sunnyvale, California CA, United States). At the time of the study, the device was the most advanced portable multivariant real-time gas analyzer. It is also used in rescue medicine and operational emergencies. The absolute concentration of oxygen (O_2 Vol%) in the air under the masks was significantly lower (minus 12.4 Vol% O_2 in absolute terms, statistically significant with $p < 0.001$) at 18.3% compared to 20.9% room air concentration. Simultaneously, a health-critical value of carbon dioxide concentration (CO_2 Vol%) increased by a factor of 30 compared to normal room air was measured (ppm with mask versus 464 ppm without mask, statistically significant with $p < 0.001$) [18].

These phenomena are responsible for a statistically significant increase in carbon dioxide (CO_2) blood content in mask wearers [19,20], on the one hand, measured transcutaneously via an increased PtcCO_2 value [15,17,19,21,22], on the other hand, via end-expiratory partial pressure of carbon dioxide (PETCO_2) [23,24] or, respectively, the arterial partial pressure of carbon dioxide (PaCO_2) [25].

In addition to the increase in the wearer's blood carbon dioxide (CO_2) levels ($p < 0.05$) [13,15,17,19,21–28], another consequence of masks that has often been experimentally proven is a statistically significant drop in blood oxygen saturation (SpO_2) ($p < 0.05$) [18,19,21,23,29–34]. A drop in blood oxygen partial pressure (PaO_2) with the effect of an accompanying increase in heart rate ($p < 0.05$) [15,23,29,30,34] as well as an increase in respiratory rate ($p < 0.05$) [15,21,23,35,36] have been proven.

A statistically significant measurable increase in pulse rate ($p < 0.05$) and decrease in oxygen saturation SpO_2 after the first ($p < 0.01$) and second hour ($p < 0.0001$) under a disposable mask (surgical mask) were reported by researchers in a mask intervention study they conducted on 53 employed neurosurgeons [30].

In another experimental study (comparative study), surgical and N95 masks caused a significant increase in heart rate ($p < 0.01$) as well as a corresponding feeling of exhaustion ($p < 0.05$). These symptoms were accompanied by a sensation of heat ($p < 0.0001$) and itching ($p < 0.01$) due to moisture penetration of the masks ($p < 0.0001$) in 10 healthy volunteers of both sexes after only 90 min of physical activity [35]. Moisture penetration was determined via sensors by evaluating logs (SCXI-1461, National Instruments, Austin, TX, USA).

These phenomena were reproduced in another experiment on 20 healthy subjects wearing surgical masks. The masked subjects showed statistically significant increases in heart rate ($p < 0.001$) and respiratory rate ($p < 0.02$) accompanied by a significant measurable increase in transcutaneous carbon dioxide PtcCO_2 ($p < 0.0006$). They also complained of breathing difficulties during the exercise [15].

The increased rebreathing of carbon dioxide (CO_2) from the enlarged dead space volume in mask wearers can reflectively trigger increased respiratory activity with increased muscular work as well as the resulting additional oxygen demand and oxygen consumption [17]. This is a reaction to pathological changes in the sense of an adaptation effect. A mask-induced drop in blood oxygen saturation value (SpO_2) [30] or the blood

oxygen partial pressure (PaO_2) [34] can in turn additionally intensify subjective chest complaints [25,34].

The documented mask-induced changes in blood gases towards hypercapnia (increased carbon dioxide/ CO_2 blood levels) and hypoxia (decreased oxygen/ O_2 blood levels) may result in additional nonphysical effects such as confusion, decreased thinking ability and disorientation [23,36–39], including overall impaired cognitive abilities and decrease in psychomotoric abilities [19,32,38–41]. This highlights the importance of changes in blood gas parameters (O_2 and CO_2) as a cause of clinically relevant psychological and neurological effects. The above parameters and effects (oxygen saturation, carbon dioxide content, cognitive abilities) were measured in a study on saturation sensors (Semi-Tec AG, Therwil, Switzerland), using a Borg Rating Scale, Frank Scale, Roberge Respirator Comfort Scale and Roberge Subjective Symptoms-during-Work Scale, as well as with a Likert scale [19]. In the other main study, conventional ECG, capnography and symptom questionnaires were used in measuring carbon dioxide levels, pulse and cognitive abilities [23]. Other physiological data collection was done with pulse oximeters (Allegiance, MCGaw, USA), subjective complaints were assessed with a 5-point Likert scale and motoric speed was recorded with linear-position transducers (Tendo-Fitrodyne, Sport Machins, Trencin, Slovakia) [32]. Some researchers used standardized, anonymized questionnaires to collect data on subjective complaints associated with masks [37].

In an experimental setting with different mask types (community, surgical, N95) a significant increase in heart rate ($p < 0.04$), a decrease in oxygen saturation SpO_2 ($p < 0.05$) with an increase in skin temperature under the mask (face) and difficulty of breathing ($p < 0.002$) were recorded in 12 healthy young subjects (students). In addition, the investigators observed dizziness ($p < 0.03$), listlessness ($p < 0.05$), impaired thinking ($p < 0.03$) and concentration problems ($p < 0.02$), which were also statistically significant when wearing masks [29].

According to other researchers and their publications, masks also interfere with temperature regulation, impair the field of vision and of non-verbal and verbal communication [15,17,19,36,37,42–45].

The above-mentioned measurable and qualitative physiological effects of masks can have implications in various areas of expertise in medicine.

It is known from pathology that not only supra-threshold stimuli exceeding normal limits have disease-relevant consequences. Subthreshold stimuli are also capable of causing pathological changes if the exposure time is long enough. Examples occur from the slightest air pollution by hydrogen sulfide resulting in respiratory problems (throat irritation, coughing, reduced absorption of oxygen) and neurological diseases (headaches, dizziness) [46]. Furthermore, subthreshold but prolonged exposure to nitrogen oxides and particulate matter is associated with an increased risk of asthma, hospitalization and higher overall mortality [47,48]. Low concentrations of pesticides are also associated with disease-relevant consequences for humans such as mutations, development of cancer and neurological disorders [49]. Likewise, the chronic subthreshold intake of arsenic is associated with an increased risk of cancer [50], subthreshold intake of cadmium with the promotion of heart failure [51], subthreshold intake of lead is associated with hypertension, renal metabolic disorders and cognitive impairment [52] or subthreshold intake of mercury with immune deficiency and neurological disorders [53]. Subliminal UV radiation exposure over long periods is also known to cause mutation-promoting carcinogenic effects (especially white skin cancer) [54].

The mask-induced adverse changes are relatively minor at first glance, but repeated exposure over longer periods in accordance with the above-mentioned pathogenetic principle is relevant. Long-term disease-relevant consequences of masks are to be expected. Insofar, the statistically significant results found in the studies with mathematically tangible differences between mask wearers and people without masks are clinically relevant. They give an indication that with correspondingly repeated and prolonged exposure to physical, chemical, biological, physiological and psychological conditions, some of which are

subliminal, but which are significantly shifted towards pathological areas, health-reducing changes and clinical pictures can develop such as high blood pressure and arteriosclerosis, including coronary heart disease (metabolic syndrome) as well as neurological diseases. For small increases in carbon dioxide in the inhaled air, this disease-promoting effect has been proven with the creation of headaches, irritation of the respiratory tract up to asthma as well as an increase in blood pressure and heart rate with vascular damage and, finally, neuropathological and cardiovascular consequences [38]. Even slightly but persistently increased heart rates encourage oxidative stress with endothelial dysfunction, via increased inflammatory messengers, and finally, the stimulation of arteriosclerosis of the blood vessels has been proven [55]. A similar effect with the stimulation of high blood pressure, cardiac dysfunction and damage to blood vessels supplying the brain is suggested for slightly increased breathing rates over long periods [56,57]. Masks are responsible for the aforementioned physiological changes with rises in inhaled carbon dioxide [18–28], small sustained increases in heart rate [15,23,29,30,35] and mild but sustained increases in respiratory rates [15,21,23,34,36].

For a better understanding of the side effects and dangers of masks presented in this literature review, it is possible to refer to well-known principles of respiratory physiology (Figure 3).

The average dead space volume during breathing in adults is approximately 150–180 mL and is significantly increased when wearing a mask covering the mouth and nose [58]. With an N95 mask, for example, the dead space volume of approximately 98–168 mL was determined in an experimental study [59]. This corresponds to a mask-related dead space increase of approximately 65 to 112% for adults and, thus, almost a doubling. At a respiratory rate of 12 per minute, the pendulum volume respiration with such a mask would, thus, be at least 2.9–3.8 L per minute. Therefore, the dead space amassed by the mask causes a relative reduction in the gas exchange volume available to the lungs per breath by 37% [60]. This largely explains the impairment of respiratory physiology reported in our work and the resulting side effects of all types of masks in everyday use in healthy and sick people (increase in respiratory rate, increase in heart rate, decrease in oxygen saturation, increase in carbon dioxide partial pressure, fatigue, headaches, dizziness, impaired thinking, etc.) [36,58].

In addition to the effect of increased dead space volume breathing, however, mask-related breathing resistance is also of exceptional importance (Figure 3) [23,36].

Experiments show an increase in airway resistance by a remarkable 126% on inhalation and 122% on exhalation with an N95 mask [60]. Experimental studies have also shown that moisturization of the mask (N95) increases the breathing resistance by a further 3% [61] and can, thus, increase the airway resistance up to 2.3 times the normal value.

This clearly shows the importance of the airway resistance of a mask. Here, the mask acts as a disturbance factor in breathing and makes the observed compensatory reactions with an increase in breathing frequency and simultaneous feeling of breathlessness plausible (increased work of the respiratory muscles). This extra strain due to the amplified work of breathing against bigger resistance caused by the masks also leads to intensified exhaustion with a rise in heart rate and increased CO₂ production. Fittingly, in our review of the studies on side effects of masks (Figure 2), we also found a percentage clustering of significant respiratory impairment and a significant drop in oxygen saturation (in about 75% of all study results).

In the evaluation of the primary papers, we also determined a statically significant correlation of the drop in oxygen saturation (SpO₂) and fatigue with a common occurrence in 58% of the mask use studies with significant results (Figure 2, $p < 0.05$).

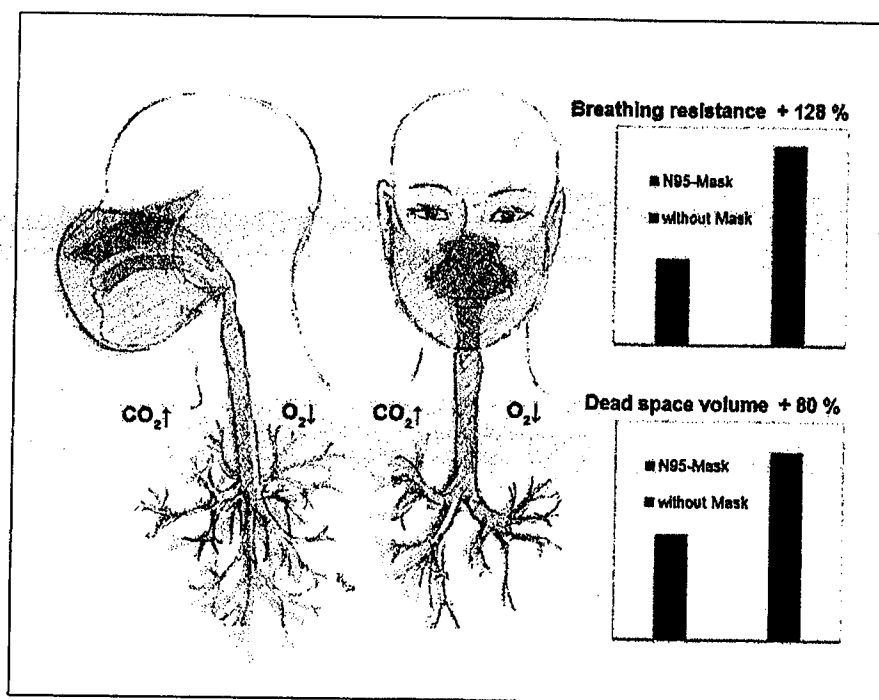


Figure 3. Pathophysiology of the mask (important physical and chemical effects): Illustration of the breathing resistance* and of the dead space volume of an N95 mask in an adult. When breathing, there is an overall significantly reduced possible gas exchange volume of the lungs of minus 37% caused by the mask (Lee 2011) [60] according to a decrease in breathing depth and volume due to the greater breathing resistance of plus 128%* (exertion when inhaling greater than when exhaling) and due to the increased dead space volume of plus 80%** which does not participate directly in the gas exchange and is being only partially mixed with the environment. (* = averaged inspiration and expiration according to Lee 2011 [60] including moisture penetration according to Roberge 2010 [61], ** = averaged values according to Xu 2015 [59]).

3.2. Internistic Side Effects and Dangers

As early as 2012, an experiment showed that walking in the 20 masked subjects compared to the identical activity without masks significantly increased heart rates (average +9.4 beats per minute, $p < 0.001$) and breathing rates ($p < 0.02$). These physiological changes were accompanied by transcutaneous significantly measurable increased transcutaneous carbon dioxide ($P_{tc}CO_2$) levels ($p < 0.0006$) as well as respiratory difficulties in the mask wearers compared to the control group [15].

In a recent experimental comparative study from 2020, 12 healthy volunteers under surgical masks as well as under N95 masks experienced measurable impairments in the measured lung function parameters as well as cardiopulmonary capacity (lower maximum blood lactate response) during moderate to heavy physical exertion compared to exertion without masks ($p < 0.001$) [31]. The mask-induced increased airway resistance led to increased respiratory work with increased oxygen consumption and demand, both of the respiratory muscles and the heart. Breathing was significantly impeded ($p < 0.001$) and participants reported mild pain. The scientists concluded from their results that the cardiac compensation of the pulmonary, mask-induced restrictions, which still functioned in healthy people, was probably no longer possible in patients with reduced cardiac output [31].

In another recent study, researchers tested fabric masks (community masks), surgical masks and FFP2/N95 masks in 26 healthy people during exercise on a cycle ergometer. All

masks also showed a measurable carbon dioxide (CO_2) retention (PtcCO_2) (statistically significant with $p < 0.001$) and, for N95 masks, a decrease in the oxygen saturation value SpO_2 (statistically significant at 75 and 100 W with $p < 0.02$ and $p < 0.005$, respectively). The clinical relevance of these changes was shown in an increase in breathing frequency with fabric masks ($p < 0.04$) as well as in the occurrence of the previously described mask-specific complaints such as a feeling of heat, shortness of breath and headaches. The stress perception was recorded on a Borg scale from 1 to 20. During physical exertion under an N95 mask, the group with masks showed a significant increase in the feeling of exhaustion compared to the group without with 14.6 versus 11.9 on the scale of 20. During the exposure, 14 of the 24 subjects wearing masks complained of shortness of breath (58%), four of headaches and two of a feeling of heat. Most of the complaints concerned FFP2 masks (72%) [21].

The aforementioned physiological and subjective physical effects of masks on healthy people at rest and under exertion [21,31] give an indication of the effect of masks on sick and elderly people even without exertion.

In an observational study of ten 20 to 50 year-old nurses wearing N95 masks during their shift work, side effects such as breathing difficulties ("I can't breathe"), feelings of exhaustion, headache ($p < 0.001$), drowsiness ($p < 0.001$) and a decrease in oxygen saturation SpO_2 ($p < 0.05$) as well as an increase in heart rate ($p < 0.001$) were statistically significant in association with an increase in obesity (BMI) [19]. The occurrence of symptoms under masks was also associated with older age (statistically significant correlation of fatigue and drowsiness with $p < 0.01$ each, nausea with $p < 0.05$, an increase in blood pressure with $p < 0.01$, headache with $p < 0.05$, breathing difficulties with $p < 0.001$) [19].

In an intervention study involving 97 patients with advanced chronic obstructive pulmonary disease (COPD) the respiratory rate, oxygen saturation and exhaled carbon dioxide equivalents (capnometry) changed unfavorably and significantly after the use of N95 masks (FFP2 equivalent) with an initial 10-minute rest and subsequent 6-minute walking. Seven patients discontinued the experiment due to serious complaints with a decrease in the oxygen saturation value SpO_2 and a pathological carbon dioxide (CO_2) retention as well as increased end-expiratory partial pressure of carbon dioxide (PETCO_2) [23]. In two patients, the PETCO_2 exceeded the normal limits and reached values of >50 mmHg. An $\text{FEV}_1 < 30\%$ and a modified Medical Research Council (mMRC) Dyspnea Scale Score of ≥ 3 , both indicators of advanced COPD, correlated with mask intolerance overall in this study. The most common symptom under mask was breathlessness at 86%. In the dropouts of the study, dizziness (57%) and headaches were also often recorded. In the mask-tolerant COPD patients, significant increases in heart rate, respiratory rate and end-expiratory carbon dioxide partial pressure PETCO_2 could be objectified even at rest, after only 10 min of mask-wearing ($p < 0.001$), accompanied by a decrease in oxygen saturation SpO_2 ($p < 0.001$) [23]. The results of this study with an evidence level IIa are indicative for COPD mask wearers.

In another retrospective comparative study on COPD and surgical masks, examiners were able to demonstrate statistically an increase in arterial partial pressure of carbon dioxide (PaCO_2) of approximately $+8$ mmHg ($p < 0.005$) and a concomitant mask-related increase in systolic blood pressure of $+11$ mmHg ($p < 0.02$) [25]. This increase is relevant in hypertensive patients, but also in healthy people with borderline blood pressure values as pathological value range triggered by mask-wearing can be induced.

In 39 hemodialysis patients with end-stage renal disease, a type N95 mask (FFP2 equivalent) caused a significant drop in blood oxygen partial pressure (PaO_2) in 70% of patients at rest (on hemodialysis) within only 4 h ($p = 0.006$). Despite a compensatory increased respiratory rate ($p < 0.001$), malaise with chest pain occurred ($p < 0.001$) and even resulted in hypoxemia (drop in oxygen below the normal limit) in 19% of the subjects [34]. The researchers concluded from their findings that elderly or patients with reduced cardiopulmonary function have a higher risk of developing a severe respiratory failure while wearing a mask [34].

In a review paper on the risks and benefits of masks worn during the COVID-19 crisis, other authors provide an equally critical assessment of mandatory mask use for patients with pneumonia, both with and without COVID-19 pneumonia disease [16].

3.3. Neurological Side Effects and Dangers

In a scientific evaluation of syncope in the operating theatre, 36 of 77 affected persons (47%) were associated with wearing a mask [62]. However, other factors could not be ruled out as contributory causes.

In their level III evidence review, neurologists from Israel, the UK and the USA state that a mask is unsuitable for epileptics because it can trigger hyperventilation [63]. The use of a mask significantly increases the respiratory rate by about plus 15 to 20% [15,21,23,34,64]. However, an increase in breathing frequency leading to hyperventilation is known to be used for provocation in the diagnosis of epilepsy and causes seizure-equivalent EEG changes in 80% of patients with generalized epilepsy and in up to 28% of focal epileptics [65].

Physicians from New York studied the effects of wearing masks of the surgical-type mask and N95 among medical personnel in a sample of 343 participants (surveyed using standardized, anonymized questionnaires). Wearing the masks caused detectable physical adverse effects such as impaired cognition (24% of wearers) and headaches in 71.4% of the participants. Of these, 28% persisted and required medication. Headache occurred in 15.2% under 1 h of wear, in 30.6% after 1 h of wear and in 29.7% after 3 h of wear. Thus, the effect intensified with increasing wearing time [37].

Confusion, disorientation and even drowsiness (Likert scale questionnaire) and reduced motoric abilities (measured with a linear position transducer) with reduced reactivity and overall impaired performance (measured with the Roberge Subjective Symptoms-during-Work Scale) as a result of mask use have also been documented in other studies [19,23,29,32,36,37].

The scientists explain these neurological impairments with a mask-induced latent drop in blood gas oxygen levels O_2 (towards hypoxia) or a latent increase in blood gas carbon dioxide levels CO_2 (towards hypercapnia) [36]. In view of the scientific data, this connection also appears to be indisputable [38–41].

In a mask experiment from 2020, significant impaired thinking ($p < 0.03$) and impaired concentration ($p < 0.02$) were found for all mask types used (fabric, surgical and N95 masks) after only 100 min of wearing the mask [29]. The thought disorders correlated significantly with a drop in oxygen saturation ($p < 0.001$) during mask use.

Initial headaches ($p < 0.05$) were experienced by up to 82% of 158, 21–35 year-old mask wearers in another study of N95 respiratory protection with one third (34%) experiencing headaches up to four times daily. Participants wore the mask for 18.3 days over a 30-day period with a mean of 5.9 h per day [66].

Significantly increased headache ($p < 0.05$) could be observed not only for N95 but also for surgical masks in participants of another observational study of health care workers [67].

In another study, the researchers classified 306 users with an average age of 43 years and wearing different types of masks, of whom 51% had an initial headache as a specific symptom related exclusively to increased surgical and N95 mask use (1 to 4 h, $p = 0.008$) [68].

Researchers from Singapore were able to demonstrate in a trial involving 154 healthy N95 health service mask wearers that a significant increase in mask-induced blood carbon dioxide levels (measured by end-expiratory partial pressure of carbon dioxide $PETCO_2$) and a measurably greater vasodilatation with an increase in cerebral artery flow in the cerebri media resulted. This was associated with headaches in the trial group ($p < 0.001$) [27].

According to the researchers, the aforementioned changes also contribute to headaches during the prolonged use of masks with a shift towards hypoxia and hypercapnia. Furthermore, stress and mechanical factors such as the irritation of cervical nerves in the neck and head area caused by the tight mask straps pressuring the nerve strands also contribute to headaches [66].

In the analysis of the primary studies, we were able to detect an association between the N95 mask and headaches. In six out of 10 studies, the significant headache appeared in conjunction with the N95 mask (60% of all studies, Figure 2).

3.4. Psychological Side Effects and Dangers

According to an experimental study, wearing surgical masks and N95 masks can also lead to a reduced quality of life owing to reduced cardiopulmonary capacity [31]. Masks, along with causing physiological changes and discomfort with progressive length of use, can also lead to significant discomfort ($p < 0.03$ to $p < 0.0001$) and a feeling of exhaustion ($p < 0.05$ to 0.0001) [69].

Besides the shift in blood gases towards hypercapnia (increase in CO_2) and hypoxia (decrease in O_2), detailed under general physiological effects (Section 3.1), masks also restrict the cognitive abilities of the individual (measured using a Likert scale survey) accompanied by a decline in psycho-motoric abilities and consequently a reduced responsiveness (measured using a linear position transducer) as well as an overall reduced performance capability (measured with the Roberge Subjective Symptoms-during-Work Scale) [29,32,38,39,41].

The mask also causes an impaired field of vision (especially affecting the ground and obstacles on the ground) and also presents an inhibition to habitual actions such as eating, drinking, touching, scratching and cleaning the otherwise uncovered part of the face, which is consciously and subconsciously perceived as a permanent disturbance, obstruction and restriction [36]. Wearing masks, thus, entails a feeling of deprivation of freedom and loss of autonomy and self-determination, which can lead to suppressed anger and subconscious constant distraction, especially as the wearing of masks is mostly dictated and ordered by others [70,71]. These perceived interferences of integrity, self-determination and autonomy, coupled with discomfort, often contribute to substantial distraction and may ultimately be combined with the physiologically mask-related decline in psycho-motoric abilities, reduced responsiveness and an overall impaired cognitive performance. It leads to misjudging situations as well as delayed, incorrect and inappropriate behavior and a decline in the effectiveness of the mask wearer [36,37,39–41].

The use of masks for several hours often causes further detectable adverse effects such as headaches, local acne, mask-associated skin irritation, itching, sensations of heat and dampness, impairments and discomfort predominantly affecting the head and face [19,29,35–37,71–73]. However, the head and face are significant for well-being due to their large representation in the sensitive cerebral cortex (homunculus) [36].

According to a questionnaire survey, masks also frequently cause anxiety and psycho-vegetative stress reactions in children—as well as in adults—with an increase in psychosomatic and stress-related illnesses and depressive self-experience, reduced participation, social withdrawal and lowered health-related self-care [74]. Over 50% of the mask wearers studied had at least mild depressive feelings [74]. Additional fear-inducing and often exaggerated media coverage can further intensify this. A recent retrospective analysis of the general media in the context of the 2014 Ebola epidemic showed a scientific truth content of only 38% of all publicly published information [75]. Researchers classified a total of 28% of the information as provocative and polarizing and 42% as exaggerating risks. In addition, 72% of the media content aimed to stir up health-related negative feelings. The feeling of fear, combined with insecurity and the primal human need to belong [76], causes a social dynamic that seems partly unfounded from a medical and scientific point of view.

The mask, which originally served purely hygienic purpose, has been transformed into a symbol of conformity and pseudo-solidarity. The WHO, for example, lists the advantages of the use of masks by healthy people in public to include a potentially reduced stigmatization of mask wearers, a sense of contribution to preventing the spread of the virus and a reminder to comply with other measures [2].

3.5. Psychiatric Side Effects and Dangers

As explained earlier, masks can cause increased rebreathing with an accumulation of carbon dioxide in the wearer due to increased dead space volume [16–18,20] (Figure 3), with often statistically significant measurable elevated blood carbon dioxide (CO₂) levels in sufferers [13,15,17,19–28] (Figure 2). However, changes that lead to hypercapnia are known to trigger panic attacks [77,78]. This makes the significantly measurable increase in CO₂ caused by wearing a mask clinically relevant.

Interestingly, breath provocation tests by inhaling CO₂ are used to differentiate anxiety states in panic disorders and premenstrual dysphoria from other psychiatric clinical pictures. Here, absolute concentrations of 5% CO₂ already suffice to trigger panic reactions within 15–16 min [77]. The normal exhaled air content of CO₂ is about 4%.

It is obvious from experimental studies on masked subjects that concentration changes in the respiratory gases in the above-mentioned range with values above 4% could occur during rebreathing with prolonged mask use [18,23].

The activation of the locus coeruleus by CO₂ is used to generate panic reactions via respiratory gases [78,79]. This is because the locus coeruleus is an important part of the system of vegetative noradrenergic neurons, a control center in the brainstem, which reacts to an appropriate stimulus and changes in the gas concentrations in the blood by releasing the stress hormone noradrenaline [78].

From the physiological, neurological and psychological side effects and dangers described above (Sections 3.1, 3.3 and 3.4), additional problems can be derived for the use of masks in psychiatric cases. People undergoing treatment for dementia, paranoid schizophrenia, personality disorders with anxiety and panic attacks, but also panic disorders with claustrophobic components, are difficult to reconcile with a mask requirement, because even small increases in CO₂ can cause and intensify panic attacks [44,77–79].

According to a psychiatric study, patients with moderate to severe dementia have no understanding of COVID-19 protection measures and have to be persuaded to wear masks constantly [80].

According to a comparative study, patients with schizophrenia have a lower acceptance of mask-wearing (54.9% agreement) than ordinary practice patients (61.6%) [81]. The extent to which mask-wearing can lead to an exacerbation of schizophrenia symptoms has not yet been researched in detail.

When wearing masks, confusion, impaired thinking, disorientation (standardized recording via special rating and Likert scales, $p < 0.05$) and in some cases a decrease in maximum speed and reaction time (measured with the linear-position transducer, $p < 0.05$) were observed [19,32,36,38–41]. Psychotropic drugs reduce psycho-motoric functions in psychiatric patients. This can become clinically relevant especially with regard to the further reduced ability to react and the additional increased susceptibility to accidents of such patients when wearing masks.

In order to avoid an unintentional CO₂-triggered anesthesia [39], fixed and medically sedated patients, without the possibility of continuous monitoring, should not be masked according to the criteria of the Centers for Disease Control and Prevention, USA (CDC). This is because of the possible CO₂ retention described above, as there is a risk of unconsciousness, aspiration and asphyxia [16,17,20,38,82,83].

3.6. Gynaecological Side Effects and Dangers

As a critical variable, a low blood carbon dioxide level in pregnant women is maintained via an increased respiratory minute volume, stimulated by progesterone [22]. For a pregnant woman and her unborn child, there is a metabolic need for a fetal–maternal carbon dioxide (CO₂) gradient. The mother's blood carbon dioxide level should always be lower than that of the unborn child in order to ensure the diffusion of CO₂ from the fetal blood into the maternal circulation via the placenta.

Therefore, mask-related phenomena described above (Sections 3.1 and 3.2), such as the measurable changes in respiratory physiology with increased breathing resistance,

increased dead space volume (Figure 3) and the retention of exhaled carbon dioxide (CO_2) are of importance. If CO_2 is increasingly rebreathed under masks, this manifestation could, even with subliminal carbon dioxide increases, act as a disturbing variable of the fetal–maternal CO_2 gradient increasing over time of exposure and, thus, develop clinical relevance, also with regard to a reduced compensation reserve of the expectant mothers [20,22,28].

In a comparative study, 22 pregnant women wearing N95 masks during 20 min of exercise showed significantly higher percutaneous CO_2 values, with average PtcCO_2 values of 33.3 mmHg compared to 31.3 mmHg than in 22 pregnant women without masks ($p = 0.04$) [22]. The heat sensation of the expectant mothers was also significantly increased with masks, with $p < 0.001$ [22].

Accordingly, in another intervention study, researchers demonstrated that breathing through an N95 mask (FFP2 equivalent) impeded gas exchange in 20 pregnant women at rest and during exercise, causing additional stress on their metabolic system [28]. Thus, under an N95 mask, 20 pregnant women showed a decrease in oxygen uptake capacity VO_2 of about 14% (statistically significant, $p = 0.013$) and a decrease in carbon dioxide output capacity VCO_2 of about 18% (statistically significant, $p = 0.001$). Corresponding significant changes in exhaled oxygen and carbon dioxide equivalents were also documented with increases in exhaled carbon dioxide (FeCO_2) ($p < 0.001$) and decreases in exhaled oxygen (FeO_2) ($p < 0.001$), which were explained by an altered metabolism due to respiratory mask obstruction [28].

In experiments with predominantly short mask application times, neither the mothers nor the fetuses showed statistically significant increases in heart rates or changes in respiratory rates and oxygen saturation values. However, the exact effects of prolonged mask use in pregnant women remain unclear overall. Therefore, in pregnant women, extended use of surgical and N95 masks is viewed critically [20].

In addition, it is unclear whether the substances contained in industrially manufactured masks that can be inhaled over longer periods of time (e.g., formaldehyde as an ingredient of the textile and thiram as an ingredient of the ear bands) are teratogenic [20,84].

3.7. Dermatological Side Effects and Dangers

Unlike garments worn over closed skin, masks cover body areas close to the mouth and nose, i.e., body parts that are involved with respiration.

Inevitably, this leads not only to a measurable temperature rise [15,44,85], but also to a severe increase in humidity due to condensation of the exhaled air, which in turn changes the natural skin milieu considerably of perioral and perinasal areas [36,61,82]. It also increases the redness, pH-value, fluid loss through the skin epithelium, increased hydration and sebum production measurably [73]. Preexisting skin diseases are not only perpetuated by these changes, but also exacerbated. In general, the skin becomes more susceptible to infections and acne.

The authors of an experimental study were able to prove a disturbed barrier function of the skin after only 4 h of wearing a mask in 20 healthy volunteers, both for surgical masks and for N95 masks [73]. In addition, germs (bacteria, fungi and viruses) accumulate on the outside and inside of the masks due to the warm and moist environment [86–89]. They can cause clinically relevant fungal, bacterial or viral infections. The unusual increase in the detection of rhinoviruses in the sentinel studies of the German Robert Koch Institute (RKI) from 2020 [90] could be another indication of this phenomenon.

In addition, a region of the skin that is not evolutionarily adapted to such stimuli is subjected to increased mechanical stress. All in all, the above-mentioned facts cause the unfavorable dermatological effects with mask related adverse skin reactions like acne, rashes on the face and itch symptoms [91].

A Chinese research group reported skin irritation and itching when using N95 masks among 542 test participants and also a correlation between the skin damage that occurred and the time of exposure (68.9% at ≤ 6 h/day and 81.7% at > 6 h/day) [92].

A New York study evaluated in a random sample of 343 participants the effects of frequent wearing of surgical mask type and N95 masks among healthcare workers during the COVID-19 pandemic. Wearing the masks caused headache in 71.4% of participants, in addition to drowsiness in 23.6%, detectable skin damage in 51% and acne in 53% of mask users [37].

On the one hand, direct mechanical skin lesions occur on the nose and cheekbones due to shear force, especially when masks are frequently put on and taken off [37,92].

On the other hand, masks create an unnaturally moist and warm local skin environment [29,36,82]. In fact, scientists were able to demonstrate a significant increase in humidity and temperature in the covered facial area in another study in which the test individuals wore masks for one hour [85]. The relative humidity under the masks was measured with a sensor (Atmo-Tube, San Francisco, CA, USA). The sensation of humidity and temperature in the facial area is more crucial for well-being than other body regions [36,44]. This can increase discomfort under the masks. In addition, the increase in temperature favors bacterial optimization.

The pressure of the masks also causes an obstruction of the flow physiology of lymph and blood vessels in the face, with the consequence of increased disturbance of skin function [73] and ultimately also contributing to acne in up to 53% of all wearers and other skin irritations in up to 51% of all wearers [36,37,82].

Other researchers examined 322 participants with N95 masks in an observational study and detected acne in up to 59.6% of them, itching in 51.4% and redness in 35.8% as side effects [72].

In up to 19.6% (273) of the 1393 wearers of different masks (community masks, surgical, N95 masks), itching could be objectified in one study, in 9% even severely. An atopic predisposition (allergy tendency) correlated with the risk of itching. The length of use was significantly related to the risk of itching ($p < 0.0001$) [93].

In another dermatological study from 2020, 96.9% of 876 users of all mask types (community masks, surgical masks, N95 masks) confirmed adverse problems with a significant increase in itching (7.7%), accompanied by fogging-up of glasses (21.3%), flushing (21.3%), slurred speech (12.3%) and difficulty breathing (35.9%) ($p < 0.01$) [71].

Apart from an increased incidence of acne [37,72,91] under masks, contact eczema and urticaria [94] are generally described in connection with hypersensitivities to ingredients of the industrially manufactured masks (surgical mask and N95) such as formaldehyde (ingredient of the textile) and thiram (ingredient of the ear bands) [73,84]. The hazardous substance thiram, originally a pesticide and corrosive, is used in the rubber industry as a optimization accelerator. Formaldehyde is a biocide and carcinogen and is used as a disinfectant in the industry.

Even isolated permanent hyperpigmentation as a result of post-inflammatory or pigmented contact dermatitis has been described by dermatologists after prolonged mask use [72,91].

3.8. ENT and Dental Side Effects and Dangers

There are reports from dental communities about negative effects of masks and are accordingly titled "mask mouth" [95]. Provocation of gingivitis (inflammation of the gums), halitosis (bad breath), candidiasis (fungal infestation of the mucous membranes with *Candida albicans*) and cheilitis (inflammation of the lips), especially of the corners of the mouth, and even plaque and caries are attributed to the excessive and improper use of masks. The main trigger of the oral diseases mentioned is an increased dry mouth due to a reduced saliva flow and increased breathing through the open mouth under the mask. Mouth breathing causes surface dehydration and reduced salivary flow rate (SFR) [95]. Dry mouth is scientifically proven due to mask wear [29]. The bad habit of breathing through the open mouth while wearing a mask seems plausible because such breathing pattern compensates for the increased breathing resistance, especially when inhaling through the masks [60,61]. In turn, the outer skin moisture [71,73,85] with altered

skin flora, which has already been described under dermatological side effects (Section 3.7), is held responsible as an explanation for the inflammation of the lips and corners of the mouth (cheilitis) [95]. This clearly shows the disease-promoting reversal of the natural conditions caused by masks. The physiological internal moisture with external dryness in the oral cavity converts into internal dryness with external moisture.

ENT physicians recently discovered a new form of irritant rhinitis due to N95 mask use in 46 patients. They performed endoscopies and nasal irrigations on mask wearers, which were subsequently assessed pathologically. Clinical problems were recorded with standardized questionnaires. They found statistically significant evidence of mask-induced rhinitis and itching and swelling of the mucous membranes as well as increased sneezing ($p < 0.01$). Endoscopically, it showed an increased secretion and evidence of inhaled mask polypropylene fibers as the trigger of mucosal irritation [96].

In a study of 221 health care workers, ENT physicians objectified a voice disorder in 33% of mask users. The VHI-10 score of 1 to 10, which measures voice disorders, was on average 5.72 higher in these mask users (statistically significant with $p < 0.001$). The mask not only acted as an acoustic filter, provoking excessively loud speech, it also seems to trigger impaired vocal cord coordination because the mask compromises the pressure gradients required for undisturbed speech [43]. The researchers concluded from their findings that masks could pose a potential risk of triggering new voice disorders as well as exacerbating existing ones.

3.9. Sports Medicine Side Effects and Dangers

According to the literature, performance-enhancing effects of masks regarding cardiovascular optimization and improvement of oxygen uptake capacity cannot be proven.

For example, in an experimental reference study (12 subjects per group), the training mask that supposedly mimics altitude training (ETM: elevation training mask) only had training effects on the respiratory muscles. However, mask wearers showed significantly lower oxygen saturation values ($SpO_2\%$) during exercise (SpO_2 of 94% for mask wearers versus 96% for mask-less, $p < 0.05$) [33], which can be explained by an increased dead space volume and increased resistance during breathing. The measured oxygen saturation values were significantly lower than the normal values in the group of mask wearers, which indicates a clinical relevance.

The proven adaptation effect of the respiratory muscles in healthy athletes [33] clearly suggests that masks have a disruptive effect on respiratory physiology.

In another intervention study on mask use in weightlifters, researchers documented statistically significant effects of reduced attention (questionnaire recording, Likert scale) and a slowed maximum speed of movement detectable by means of sensors (both significant at $p < 0.001$), leading the researchers to conclude that mask use in sport is not without risks. As a secondary finding, they also detected a significant decrease in oxygen saturation SpO_2 when performing special weight-lifting exercises ("back squats") in the mask group after only 1 min of exercise compared to the mask-free group ($p < 0.001$) [32]. The proven tendency of the masks to shift the chemical parameter oxygen saturation SpO_2 in a pathological direction (lower limit value 95%) may well have clinical relevance in untrained or sick individuals.

Sports medicine confirmed an increase in carbon dioxide (CO_2) retention, with an elevation in CO_2 partial pressure in the blood with larger respiratory dead space volumes [14].

In fact, dead space-induced CO_2 retention while wearing a mask during exercise was also experimentally proven. The effects of a short aerobic exercise under N95 masks were tested on 16 healthy volunteers. A significantly increased end-expiratory partial pressure of carbon dioxide ($PETCO_2$) with plus 8 mmHg ($p < 0.001$) was found [24]. The increase in blood carbon dioxide (CO_2) in the mask wearers under maximum load was plus 14% CO_2 for surgical masks and plus 23% CO_2 for N95 masks, an effect that may well have clinical relevance in the pre-diseased, elderly and children, as these values strongly approached the pathological range [24].

In an interesting endurance study with eight middle-aged subjects (19–66), the gas content for O_2 and CO_2 under the masks was determined before and after exercise. Even at rest, the oxygen availability under the masks was 13% lower than without the masks and the carbon dioxide (CO_2) concentration was 30 times higher. Under stress (Ruffier test), the oxygen concentration (% O_2) below the mask dropped significantly by a further 3.7%, while the carbon dioxide concentration (% CO_2) increased significantly by a further 20% (statistically significant with $p < 0.001$). Correspondingly, the oxygen saturation of the blood (SpO_2) of the test persons also decreased significantly from 97.6 to 92.1% ($p < 0.02$) [18]. The drop in the oxygen saturation value (SpO_2) to 92%, clearly below the normal limit of 95%, is to be classified as clinically relevant and detrimental to health.

These facts are an indication that the use of masks also triggers the effects described above leading to hypoxia and hypercapnia in sports. Accordingly, the WHO and Centers for Disease Control and Prevention, GA, USA (CDC) advise against wearing masks during physical exercise [82,97].

3.10. Social and Sociological Side Effects and Dangers

The results of a Chilean study with health care workers show that masks act like an acoustic filter and provoke excessively loud speech. This causes a voice disorder [43]. The increased volume of speech also contributes to increased aerosol production by the mask wearer [98]. These experimental data measured with the Aerodynamic Particle Sizer (APS, TSI, model 332, TSI Incorporated, Minnesota, MI, USA) are highly relevant.

Moreover, mask wearers are prevented from interacting normally in everyday life due to impaired clarity of speech [45], which tempts them to get closer to each other.

This results in a distorted prioritization in the general public, which counteracts the recommended measures associated with the COVID-19 pandemic. The WHO prioritizes social distancing and hand hygiene with moderate evidence and recommends wearing a mask with weak evidence, especially in situations where individuals are unable to maintain a physical distance of at least 1 m [3].

The disruption of non-verbal communication due to the loss of facial expression recognition under the mask can increase feelings of insecurity, discouragement and numbness as well as isolation, which can be extremely stressful for the mentally and hearing-impaired [16].

Experts point out that masks disrupt the basics of human communication (verbal and nonverbal). The limited facial recognition caused by masks leads to a suppression of emotional signals. Masks, therefore, disrupt social interaction, erasing the positive effect of smiles and laughter but at the same time greatly increasing the likelihood of misunderstandings because negative emotions are also less evident under masks [42].

A decrease in empathy perception through mask use with disruption of the doctor-patient relationship has already been scientifically proven on the basis of a randomized study (statistically significant, with $p = 0.04$) [99]. In this study, the Consultation Empathy Care Measure, the Patient Enablement Instrument (PEI) Score and a Satisfaction Rating Scale were assessed in 1030 patients. The 516 doctors, who wore masks throughout, conveyed reduced empathy towards the patients and, thus, nullified the positive health-promoting effects of a dynamic relationship. These results demonstrate a disruption of interpersonal interaction and relationship dynamics caused by masks.

The WHO guidance on the use of masks in children in the community, published in August 2020, points out that the benefits of mask use in children must be weighed up against the potential harms, including social and communicational concerns [100].

Fears that widespread pandemic measures will lead to dysfunctional social life with degraded social, cultural and psychological interactions have also been expressed by other experts [6–8,42].

3.11. Social and Occupational Medicine Side Effects and Hazards

In addition to mask-specific complaints such as a feeling of heat, dampness, shortness of breath and headache, various physiological phenomena were documented, such as the significant increase in heart and respiratory rate, the impairment of lung function parameters, the decrease in cardiopulmonary capacity (e.g., lower maximum blood lactate response) [15,19,21,23,29–31], as well as the changes in oxygen and carbon dioxide both in the end-expiratory and the air under the mask that was measured in the blood of the individuals [13,15,18,19,21–25,27–34]. The significant changes were measurable after only a few minutes of wearing a mask and in some cases reached magnitudes of minus 13% reduced O₂ concentration and 30-fold increased CO₂ concentration of the inhaled air under masks ($p < 0.001$) [18]. The changes observed were not only statistically significant, but also clinically relevant; the subjects also showed pathological oxygen saturation after exposure to masks ($p < 0.02$) [18].

Shortness of breath during light exertion (6 min walking) under surgical masks has been recorded with statistical significance in 44 healthy subjects in a prospective experimental intervention study ($p < 0.001$) [101]. Here, the complaints were assessed using a subjective, visual analogue scale.

In another study from 2011, all tested masks caused a significantly measurable increase in discomfort and a feeling of exhaustion in the 27 subjects during prolonged usage ($p < 0.0001$) [69].

These symptoms lead to additional stress for the occupational mask wearer and, thus, in relation to the feeling of exhaustion, contribute to the self-perpetuating vicious circle caused by the vegetative sympathetic activation, which further increases the respiratory and heart rate, blood pressure and increased sense of exhaustion [16,20,35,83].

Other studies showed that the psychological and physical effects of the masks can lead to an additional reduction in work performance (measured with the Roberge Subjective Symptoms-during-Work Scale, a Likert scale of 1–5) via increased feelings of fatigue, dissatisfaction and anxiety [58,102,103].

Wearing masks over a longer period of time also led to physiological and psychological impairments in other studies and, thus, reduced work performance [19,36,58,69]. In experiments on respiratory-protective equipment, an increase in the dead space volume by 350 mL leads to a reduction in the possible performance time by approx. –19%, furthermore to a decrease in breathing comfort by –18% (measured via a subjective rating scale) [58]. In addition, the time spent working and the flow of work is interrupted and reduced by putting on and taking off the masks and changing them. The reduced work performance has been recorded in the literature found as described above (especially in Sections 3.1 and 3.2) but has not been quantified further in detail [36,58].

Surgical mask type and N95 protective equipment frequently caused adverse effects in medical personnel such as headaches, breathing difficulties, acne, skin irritation, itching, decreased alertness, decreased mental performance and feelings of dampness and heat [19,29,37,71,85]. Subjective, work performance-reducing, mask-related impairments in users, measured with special survey scores and Likert scales, have also been described in other studies [15,21,27,32,35,43,66–68,72,96,99].

In Section 3.7 on dermatology, we already mentioned a paper that demonstrated a significant temperature increase of 1.9 °C on average (to over 34.5 °C) in the mask-covered facial area ($p < 0.05$) [85]. Due to the relatively larger representation in the sensitive cerebral cortex (homunculus), the temperature sensation in the face is more decisive for the feeling of well-being than other body regions [36,44]. The perception of discomfort when wearing a mask can, thus, be intensified. Interestingly, in our analysis, we found a combined occurrence of the physical variable temperature rise under the mask and the symptom respiratory impairment in seven of eight studies concerned, with a mutual significantly measured occurrence in 88%. We also detected a combined occurrence of significantly measured temperature rise under the mask and significantly measured fatigue in 50% of the relevant primary studies (three of six papers, Figure 2). These clustered associations of

temperature rise with symptoms of respiratory impairment and fatigue suggest a clinical relevance of the detected temperature rise under masks. In the worst case scenario, the effects mentioned can reinforce each other and lead to decompensation, especially in the presence of COPD, heart failure and respiratory insufficiency.

The sum of the disturbances and discomforts that can be caused by a mask also contributes to distraction (see also psychological impairment). These, in conjunction with a decrease in psycho-motoric skills, reduced responsiveness and overall impaired cognitive performance (all of which are pathophysiological effects of wearing a mask) [19,29,32,39–41] can lead to a failure to recognize hazards and, thus, to accidents or avoidable errors at work [19,36,37]. Of particular note here are mask-induced listlessness ($p < 0.05$), impaired thinking ($p < 0.05$) and concentration problems ($p < 0.02$) as measured by a Likert scale (1–5) [29]. Accordingly, occupational health regulations take action against such scenarios. The German Industrial Accident Insurance (DGUV) has precise and extensive regulations for respiratory protective equipment where they document the limitation of wearing time, levels of work intensity and defined instruction obligation [104].

The standards and norms prescribed in many countries regarding different types of masks to protect their workers are also significant from an occupational health point of view [105]. In Germany, for example, there are very strict safety specifications for masks from other international countries. These specify the requirements for the protection of the wearer [106]. All these standards and the accompanying certification procedures were increasingly relaxed with the introduction of mandatory masks for the general public. This meant that non-certified masks such as community masks were also used on a large scale in the work and school sectors for longer periods during the pandemic measures [107]. Most recently, in October 2020, the German Social Accident Insurance (DGUV) recommended the same usage time limits for community masks as for filtering half masks, namely, a maximum of three shifts of 120 min per day with recovery breaks of 30 min in between. In Germany, FFP2 (N95) masks must be worn for 75 min, followed by a 30-minute break. An additional suitability examination by specialized physicians is also obligatory and stipulated for occupationally used respirators [104].

3.12. Microbiological Consequences for Wearer and Environment: Foreign/Self-Contamination

Masks cause retention of moisture [61]. Poor filtration performance and incorrect use of surgical masks and community masks, as well as their frequent reuse, imply an increased risk of infection [108–110]. The warm and humid environment created by and in masks without the presence of protective mechanisms such as antibodies, the complement system, defense cells and pathogen-inhibiting and on a mucous membrane paves the way for unimpeded growth and, thus, an ideal growth and breeding ground for various pathogens such as bacteria and fungi [88] and also allows viruses to accumulate [87]. The warm and humid mask microclimate favors the accumulation of various germs on and underneath the masks [86], and the germ density is measurably proportional to the length of time the mask is worn. After only 2 h of wearing the mask, the pathogen density increases almost tenfold in experimental observation studies [87,89].

From a microbiological and epidemiological point of view, masks in everyday use pose a risk of contamination. This can occur as foreign contamination but also as self-contamination. On the one hand, germs are sucked in or attach themselves to the masks through convection currents. On the other hand, potential infectious agents from the nasopharynx accumulate excessively on both the outside and inside of the mask during breathing [5,88]. This is compounded by contact with contaminated hands. Since masks are constantly penetrated by germ-containing breath and the pathogen reproduction rate is higher outside mucous membranes, potential infectious pathogens accumulate excessively on the outside and inside of masks. On and in the masks, there are quite serious, potentially disease-causing bacteria and fungi such as *E. coli* (54% of all germs detected), *Staphylococcus aureus* (25% of all germs detected), *Candida* (6%), *Klebsiella* (5%), *Enterococci* (4%),

Pseudomonads (3%), *Enterobacter* (2%) and *Micrococcus* (1%) even detectable in large quantities [88].

In another microbiological study, the bacterium *Staphylococcus aureus* (57% of all bacteria detected) and the fungus *Aspergillus* (31% of all fungi detected) were found to be the dominant germs on 230 surgical masks examined [86].

After more than six hours of use, the following viruses were found in descending order on 148 masks worn by medical personnel: adenovirus, bocavirus, respiratory syncytial virus and influenza viruses [87].

From this aspect, it is also problematic that moisture distributes these potential pathogens in the form of tiny droplets via capillary action on and in the mask, whereby further proliferation in the sense of self- and foreign contamination by the aerosols can then occur internally and externally with every breath [35]. In this regard, it is also known from the literature that masks are responsible for a proportionally disproportionate production of fine particles in the environment and, surprisingly, much more so than in people without masks [98].

It was shown that all mask-wearing subjects released significantly more smaller particles of size 0.3–0.5 μm into the air than mask-less people, both when breathing, speaking and coughing (fabric, surgical, N95 masks, measured with the Aerodynamic Particle Sizer, APS, TS, model 3329) [98]. The increase in the detection of rhinoviruses in the sentinel studies of the German RKI from 2020 [90] could be a further indication of this phenomenon, as masks were consistently used by the general population in public spaces in that year.

3.13. Epidemiological Consequences

The possible side effects and dangers of masks described in this paper are based on studies of different types of masks. These include the professional masks of the surgical mask type and N95/KN95 (FFP2 equivalent) that are commonly used in everyday life, but also the community fabric masks that were initially used. In the case of N95, the N stands for National Institute for Occupational Safety and Health of the United States (NIOSH), and 95 indicates the 95 per cent filtering capacity for fine particles up to at least 0.3 μm [82].

A major risk of mask use in the general public is the creation of a false sense of security with regard to protection against viral infections, especially in the sense of a falsely assumed strong self-protection. Disregarding infection risks may not only neglect aspects of source control, but also result in other disadvantages. Although there are quite a few professional positive accounts of the widespread use of masks in the general populace [111], most of the serious and evident scientific reports conclude that the general obligation to wear masks conveys a false sense of security [4,5]. However, this leads to a neglect of those measures that, according to the WHO, have a higher level of effectiveness than mask-wearing: social distancing and hand hygiene [2,112]. Researchers were able to provide statistically significant evidence of a false sense of security and more risky behavior when wearing masks in an experimental setting [112].

Decision makers in many countries informed their citizens early on in the pandemic in March 2020 that people without symptoms should not use a medical mask, as this created a false sense of security [113]. The recommendation was ultimately changed in many countries. At least Germany pointed out that wearers of certain types of masks such as the common fabric masks (community masks) cannot rely on them to protect them or others from transmission of SARS-CoV-2 [114].

However, scientists not only complain about the lack of evidence for fabric masks in the scope of a pandemic [16,110], but also about the high permeability of fabric masks with particles and the potential risk of infection they pose [108,109]. Ordinary fabric masks with a 97% penetration for particle dimensions of $\geq 0.3 \mu\text{m}$ are in stark contrast to medical-type surgical masks with a 44% penetration. In contrast, the N95 mask has a penetration rate of less than 0.01% for particles $\geq 0.3 \mu\text{m}$ in the laboratory experiment [108,115].

For the clinical setting in hospitals and outpatient clinics, the WHO guidelines recommend only surgical masks for influenza viruses for the entire patient treatment except for the strongly aerosol-generating measures, for which finer filtering masks of the type N95 are suggested. However, the WHO's endorsement of specific mask types is not entirely evidence-based due to the lack of high-quality studies in the health sector [108,109,116,117].

In a laboratory experiment (evidence level IIa study), it was demonstrated that both surgical masks and N95 masks have deficits in protection against SARS-CoV-2 and influenza viruses using virus-free aerosols [118]. In this study, the FFP2-equivalent N95 mask performed significantly better in protection (8–12 times more effective) than the surgical mask, but neither mask type established reliable, hypothesis-generated protection against corona and influenza viruses. Both mask types could be penetrated unhindered by aerosol particles with a diameter of 0.08 to 0.2 μm . Both the SARS-CoV-2 pathogens with a size of 0.06 to 0.14 μm [119] and the influenza viruses with 0.08 to 0.12 μm are unfortunately well below the mask pore sizes [118].

The filtering capacity of the N95 mask up to 0.3 μm [82] is usually not achieved by surgical masks and community masks. However, aerosol droplets, which have a diameter of 0.09 to 3 μm in size, are supposed to serve as a transport medium for viruses. These also penetrate the medical masks by 40%. Often, there is also a poor fit between the face and the mask, which further impairs their function and safety [120]. The accumulation of aerosol droplets on the mask is problematic. Not only do they absorb nanoparticles such as viruses [6], but they also follow the airflow when inhaling and exhaling, causing them to be carried further. In addition, a physical decay process has been described for aerosol droplets at increasing temperatures, as also occurs under a mask [15,44,85]. This process can lead to a decrease in size of the fine water droplets up to the diameter of a virus [121,122]. The masks filter larger aerosol droplets but cannot retain viruses themselves and such smaller, potentially virus-containing aerosol droplets of less than 0.2 μm and hence cannot stop the spread of virus [123].

Similarly, in an in vivo comparative studies of N95 and surgical masks, there were no significant differences in influenza virus infection rates [124,125]. Although this contrasts with encouraging in vitro laboratory results with virus-free aerosols under non-natural conditions, even with fabric masks [126], it should be noted that under natural in-vivo conditions, the promising filtration functions of fabric masks based on electrostatic effects also rapidly diminish under increasing humidity [127]. A Swiss textile lab test of various masks available on the market to the general public recently confirmed that most mask types filter aerosols insufficiently. For all but one of the eight reusable fabric mask types tested, the filtration efficacy according to EN149 was always less than 70% for particles of 1 μm in size. For disposable masks, only half of all eight mask types tested were efficient enough at filtering to retain 70% of particles 1 μm in size [128].

A recent experimental study even demonstrated that all mask-wearing people (surgical, N95, fabric masks) release significantly and proportionately smaller particles of size 0.3 to 0.5 μm into the air than mask-less people, both when breathing, speaking and coughing [98]. According to this, the masks act like nebulizers and contribute to the production of very fine aerosols. Smaller particles, however, spread faster and further than large ones for physical reasons. Of particular interest in this experimental reference study was the finding that a test subject wearing a single-layer fabric mask was also able to release a total of 384% more particles (of various sizes) when breathing than a person without [98].

It is not only the aforementioned functional weaknesses of the masks themselves that lead to problems, but also their use. This increases the risk of a false sense of security. According to the literature, mistakes are made by both healthcare workers and lay people when using masks as hygienically correct mask use is by no means intuitive. Overall, 65% of healthcare professionals and as many as 78% of the general population, use masks incorrectly [116]. With both surgical masks and N95 masks, adherence to the rules of use is impaired and not adequately followed due to reduced wearability with heat discomfort and skin irritation [29,35,116,129]. This is exacerbated by the accumulation of carbon dioxide

due to the dead space (especially under the N95 masks) with the resulting headaches described [19,27,37,66–68,83]. Increased heart rate, itching and feelings of dampness [15,29,30,35,71] also lead to reduced safety and quality during use (see also social and occupational health side effects and hazards). For this reason, (everyday) masks are even considered a general risk for infection in the general population, which does not come close to imitating the strict hygiene rules of hospitals and doctors' offices: the supposed safety, thus, becomes a safety risk itself [5].

In a meta-analysis of evidence level Ia commissioned by the WHO, no effect of masks in the context of influenza virus pandemic prevention could be demonstrated [130]. In 14 randomized controlled trials, no reduction in the transmission of laboratory-confirmed influenza infections was shown. Due to the similar size and distribution pathways of the virus species (influenza and Corona, see above), the data can also be transferred to SARS-CoV-2 [118]. Nevertheless, a combination of occasional mask-wearing with adequate hand-washing caused a slight reduction in infections for influenza in one study [131]. However, since no separation of hand hygiene and masks was achieved in this study, the protective effect can rather be attributed to hand hygiene in view of the aforementioned data [131].

A recently published large prospective Danish comparative study comparing mask wearers and non-mask wearers in terms of their infection rates with SARS-CoV2 could not demonstrate any statistically significant differences between the groups [132].

3.14. Paediatric Side Effects and Hazards

Children are particularly vulnerable and may be more likely to receive inappropriate treatment or additional harm. It can be assumed that the potential adverse mask effects described for adults are all the more valid for children (see Section 3.1 to Section 3.13: physiological internal, neurological, psychological, psychiatric, dermatological, ENT, dental, sociological, occupational and social medical, microbiological and epidemiological impairments and also Figures 2 and 3).

Special attention must be paid to the respiration of children, which represents a critical and vulnerable physiological variable due to higher oxygen demand, increased hypoxia susceptibility of the CNS, lower respiratory reserve, smaller airways with a stronger increase in resistance when the lumen is narrowed. The diving reflex caused by stimulating the nose and upper lip can cause respiratory arrest to bradycardia in the event of oxygen deficiency.

The masks currently used for children are exclusively adult masks manufactured in smaller geometric dimensions and had neither been specially tested nor approved for this purpose [133].

In an experimental British research study, the masks frequently led to feelings of heat ($p < 0.0001$) and breathing problems ($p < 0.03$) in 100 school children between 8 and 11 years of age especially during physical exertion, which is why the protective equipment was taken off by 24% of the children during physical activity [133]. The exclusion criteria for this mask experiment were lung disease, cardiovascular impairment and claustrophobia [133].

Scientists from Singapore were able to demonstrate in their level Ib study published in the renowned journal "nature" that 106 children aged between 7 and 14 years who wore FFP2 masks for only 5 min showed an increase in the inspiratory and expiratory CO₂ levels, indicating disturbed respiratory physiology [26].

However, a disturbed respiratory physiology in children can have long-term disease-relevant consequences. Slightly elevated CO₂ levels are known to increase heart rate, blood pressure, headache, fatigue and concentration disorders [38].

Accordingly, the following conditions were listed as exclusion criteria for mask use [26]: any cardiopulmonary disease including but not limited to: asthma, bronchitis, cystic fibrosis, congenital heart disease, emphysema; any condition that may be aggravated by physical exertion, including but not limited to: exercise-induced asthma; lower respiratory tract infections (pneumonia, bronchitis within the last 2 weeks), anxiety disorders,

diabetes, hypertension or epilepsy/attack disorder; any physical disability due to medical, orthopedic or neuromuscular disease; any acute upper respiratory illness or symptomatic rhinitis (nasal obstruction, runny nose or sneezing); any condition with deformity that affects the fit of the mask (e.g., increased facial hair, craniofacial deformities, etc.).

It is also important to emphasize the possible effects of masks in neurological diseases, as described earlier (Section 3.3).

Both masks and face shields caused fear in 46% of children (37 out of 80) in a scientific study. If children are given the choice of whether the doctor examining them should wear a mask they reject this in 49% of the cases. Along with their parents, the children prefer the practitioner to wear a face visor (statistically significant with $p < 0.0001$) [134].

A recent observational study of tens of thousands of mask-wearing children in Germany helped the investigators objectify complaints of headaches (53%), difficulty concentrating (50%), joylessness (49%), learning difficulties (38%) and fatigue in 37% of the 25,930 children evaluated. Of the children observed, 25% had new onset anxiety and even nightmares [135]. In children, the threat scenarios generated by the environment are further maintained via masks, in some cases, even further intensified, and in this way, existing stress is intensified (presence of subconscious fears) [16,35,136,137].

This can in turn lead to an increase in psychosomatic and stress-related illnesses [74,75]. For example, according to an evaluation, 60% of mask wearers showed stress levels of the highest grade 10 on a scale of 1 to a maximum of 10. Less than 10% of the mask wearers surveyed had a stress level lower than 8 out of a possible 10 [74].

As children are considered a special group, the WHO also issued a separate guideline on the use of masks in children in the community in August 2020, explicitly advising policy makers and national authorities, given the limited evidence, that the benefits of mask use in children must be weighed up against the potential harms associated with mask use. This includes feasibility and discomfort, as well as social and communication concerns [100].

According to experts, masks block the foundation of human communication and the exchange of emotions and not only hinder learning but deprive children of the positive effects of smiling, laughing and emotional mimicry [42]. The effectiveness of masks in children as a viral protection is controversial, and there is a lack of evidence for their widespread use in children; this is also addressed in more detail by the scientists of the German University of Bremen in their thesis paper 2.0 and 3.0 [138].

3.15. Effects on the Environment

According to WHO estimates of a demand of 89 million masks per month, their global production will continue to increase under the Corona pandemic [139]. Due to the composition of, e.g., disposable surgical masks with polymers such as polypropylene, polyurethane, polyacrylonitrile, polystyrene, polycarbonate, polyethylene and polyester [140], an increasing global challenge; also from an environmental point of view, can be expected, especially outside Europe, in the absence of recycling and disposal strategies [139]. The aforementioned single use polymers have been identified as a significant source of plastic and plastic particles for the pollution of all water cycles up to the marine environment [141].

A significant health hazard factor is contributed by mask waste in the form of microplastics after decomposition into the food chain. Likewise, contaminated macroscopic disposable mask waste—especially before microscopic decay—represents a widespread medium for microbes (protozoa, bacteria, viruses, fungi) in terms of invasive pathogens [86–89,142]. Proper disposal of bio-contaminated everyday mask material is insufficiently regulated even in western countries.

4. Discussion

The potential drastic and undesirable effects found in multidisciplinary areas illustrate the general scope of global decisions on masks in general public in the light of combating the pandemic. According to the literature found, there are clear, scientifically recorded adverse effects for the mask wearer, both on a psychological and on a social and physical level.

Neither higher level institutions such as the WHO or the European Centre for Disease Prevention and Control (ECDC) nor national ones, such as the Centers for Disease Control and Prevention, GA, USA (CDC) or the German RKI, substantiate with sound scientific data a positive effect of masks in the public (in terms of a reduced rate of spread of COVID-19 in the population) [2,4,5].

Contrary to the scientifically established standard of evidence-based medicine, national and international health authorities have issued their theoretical assessments on the masks in public places, even though the compulsory wearing of masks gives a deceptive feeling of safety [5,112,143].

From an infection epidemiological point of view, masks in everyday use offer the risk of self-contamination by the wearer from both inside and outside, including via contaminated hands [5,16,88]. In addition, masks are soaked by exhaled air, which potentially accumulates infectious agents from the nasopharynx and also from the ambient air on the outside and inside of the mask. In particular, serious infection-causing bacteria and fungi should be mentioned here [86,88,89], but also viruses [87]. The unusual increase in the detection of rhinoviruses in the sentinel studies of the German RKI from 2020 [90] could be an indication of this phenomenon. Clarification through further investigations would therefore be desirable.

Masks, when used by the general public, are considered by scientists to pose a risk of infection because the standardized hygiene rules of hospitals cannot be followed by the general public [5]. On top of that, mask wearers (surgical, N95, fabric masks) exhale relatively smaller particles (size 0.3 to 0.5 μm) than mask-less people and the louder speech under masks further amplifies this increased fine aerosol production by the mask wearer (nebulizer effect) [98].

The history of modern times shows that already in the influenza pandemics of 1918–1919, 1957–58, 1968, 2002, in SARS 2004–2005 as well as with the influenza in 2009, masks in everyday use could not achieve the hoped-for success in the fight against viral infection scenarios [67,144]. The experiences led to scientific studies describing as early as 2009 that masks do not show any significant effect with regard to viruses in an everyday scenario [129,145]. Even later, scientists and institutions rated the masks as unsuitable to protect the user safely from viral respiratory infections [137,146,147]. Even in hospital use, surgical masks lack strong evidence of protection against viruses [67].

Originally born out of the useful knowledge of protecting wounds from surgeons' breath and predominantly bacterial droplet contamination [144,148,149], the mask has been visibly misused with largely incorrect popular everyday use, particularly in Asia in recent years [150]. Significantly, the sociologist Beck described the mask as a cosmetic of risk as early as 1992 [151]. Unfortunately, the mask is inherent in a vicious circle: strictly speaking, it only protects symbolically and at the same time represents the fear of infection. This phenomenon is reinforced by the collective fear mongering, which is constantly nurtured by main stream media [137].

Nowadays, the mask represents a kind of psychological support for the general population during the virus pandemic, promising them additional anxiety-reduced freedom of movement. The recommendation to use masks in the sense of "source control" not out of self-protection but out of "altruism" [152] is also very popular with the regulators as well as the population of many countries. The WHO's recommendation of the mask in the current pandemic is not only a purely infectiological approach, but is also clear on the possible advantages for healthy people in the general public. In particular, a reduced potential stigmatization of mask wearers, the feeling of a contribution made to preventing the spread of the virus, as well as the reminder to adhere to other measures are mentioned [2].

It should not go unmentioned that very recent data suggest that the detection of SARS-CoV-2 infection does not seem to be directly related to popular mask use. The groups examined in a retrospective comparative study (infected with SARS-CoV-2 and not infected) did not differ in their habit of using masks: approximately 70% of the subjects in both groups always wore masks and another 14.4% of them frequently [143].

In a Danish prospective study on mask-wearing carried out on about 6000 participants and published in 2020, scientists found no statistically significant difference in the rates of SARS-CoV-2 infection when comparing the group of 3030 mask wearers with the 2994 mask-less participants in the study ($p = 0.38$) [132].

Indeed, in the case of viral infections, masks appear to be not only less effective than expected, but also not free of undesirable biological, chemical, physical and psychological side effects [67]. Accordingly, some experts claim that well-intentioned unprofessionalism can be quite dangerous [6].

The dermatological colleagues were the first to describe common adverse effects of mask-wearing in larger collectives. Simple, direct physical, chemical and biological effects of the masks with increases in temperature, humidity and mechanical irritation caused acne in up to 60% of wearers [37,71–73,85]. Other significantly documented consequences were eczema, skin damage and overall impaired skin barrier function [37,72,73].

These direct effects of mask use are an important pointer to further detrimental effects affecting other organ systems.

In our work, we have identified scientifically validated and numerous statistically significant adverse effects of masks in various fields of medicine, especially with regard to a disruptive influence on the highly complex process of breathing and negative effects on the respiratory physiology and gas metabolism of the body (see Figures 2 and 3). The respiratory physiology and gas exchange play a key role in maintaining a health-sustaining balance in the human body [136,153]. According to the studies we found, a dead space volume that is almost doubled by wearing a mask and a more than doubled breathing resistance (Figure 3) [59–61] lead to a rebreathing of carbon dioxide with every breathing cycle [16–18,39,83] with—in healthy people mostly—a subthreshold but, in sick people, a partly pathological increase in the carbon dioxide partial pressure (PaCO_2) in the blood [25,34,58]. According to the primary studies found, these changes contribute reflexively to an increase in respiratory frequency and depth [21,23,34,36] with a corresponding increase in the work of the respiratory muscles via physiological feedback mechanisms [31,36]. Thus, it is not, as initially assumed, purely positive training through mask use. This often increases the subliminal drop in oxygen saturation SpO_2 in the blood [23,28–30,32], which is already reduced by increased dead space volume and increased breathing resistance [18,31].

The overall possible resulting measurable drop in oxygen saturation O_2 of the blood on the one hand [18,23,28–30,32] and the increase in carbon dioxide (CO_2) on the other [13,15,19,21–28] contribute to an increased noradrenergic stress response, with heart rate increase [29,30,35] and respiratory rate increase [15,21,23,34], in some cases also to a significant blood pressure increase [25,35].

In panic-prone individuals, stress-inducing noradrenergic sympathetic activation can be partly directly mediated via the carbon dioxide (CO_2) mechanism at the locus coeruleus in the brainstem [39,78,79,153], but also in the usual way via chemo-sensitive neurons of the nucleus solitarius in the medulla [136,154]. The nucleus solitarius [136] is located in the deepest part of the brainstem, a gateway to neuronal respiratory and circulatory control [154]. A decreased oxygen (O_2) blood level there causes the activation of the sympathetic axis via chemoreceptors in the carotids [155,156].

Even subthreshold changes in blood gases such as those provoked when wearing a mask cause reactions in these control centers in the central nervous system. Masks, therefore, trigger direct reactions in important control centers of the affected brain via the slightest changes in oxygen and carbon dioxide in the blood of the wearer [136,154,155].

A link between disturbed breathing and cardiorespiratory diseases such as hypertension, sleep apnea and metabolic syndrome has been scientifically proven [56,57]. Interestingly, decreased oxygen/ O_2 blood levels and also increased carbon dioxide/ CO_2 blood levels are considered the main triggers for the sympathetic stress response [38,136]. The aforementioned chemo-sensitive neurons of the nucleus solitarius in the medulla are considered to be the main responsible control centers [136,154,155]. Clinical effects of prolonged mask-wearing would, thus, be a conceivable intensification of chronic stress re-

actions and negative influences on the metabolism leading towards a metabolic syndrome. The mask studies we found show that such disease-relevant respiratory gas changes (O_2 and CO_2) [38,136] are already achieved by wearing a mask [13,15,18,19,21–34].

A connection between hypoxia, sympathetic reactions and leptin release is scientifically known [136].

Additionally important is the connection of breathing with the influence on other bodily functions [56,57], including the psyche with the generation of positive emotions and drive [153]. The latest findings from neuro-psychobiological research indicate that respiration is not only a function regulated by physical variables to control them (feedback mechanism), but rather independently influences higher-level brain centers and, thus, also helps to shape psychological and other bodily functions and reactions [153,157,158]. Since masks impede the wearer's breathing and accelerate it, they work completely against the principles of health-promoting breathing [56,57] used in holistic medicine and yoga. According to recent research, undisturbed breathing is essential for happiness and healthy drive [157,159], but masks work against this.

The result of significant changes in blood gases in the direction of hypoxia (drop in oxygen saturation) and hypercapnia (increase in carbon dioxide concentration) through masks, thus, has the potential to have a clinically relevant influence on the human organism even without exceeding normal limits.

According to the latest scientific findings, blood-gas shifts towards hypoxia and hypercapnia not only have an influence on the described immediate, psychological and physiological reactions on a macroscopic and microscopic level, but additionally on gene expression and metabolism on a molecular cellular level in many different body cells. Through this, the drastic disruptive intervention of masks in the physiology of the body also becomes clear down to the cellular level, e.g., in the activation of hypoxia-induced factor (HIF) through both hypercapnia and hypoxia-like effects [160]. HIF is a transcription factor that regulates cellular oxygen supply and activates signaling pathways relevant to adaptive responses. e.g., HIF inhibits stem cells, promotes tumor cell growth and inflammatory processes [160]. Based on the hypoxia- and hypercapnia-promoting effects of masks, which have been comprehensively described for the first time in our study, potential disruptive influences down to the intracellular level (HIF- α) can be assumed, especially through the prolonged and excessive use of masks. Thus, in addition to the vegetative chronic stress reaction in mask wearers, which is channeled via brain centers, there is also likely to be an adverse influence on metabolism at the cellular level. With the prospect of continued mask use in everyday life, this also opens up an interesting field of research for the future.

The fact that prolonged exposure to latently elevated CO_2 levels and unfavorable breathing air compositions has disease-promoting effects was recognized early on. As early as 1983, the WHO described "Sick Building Syndrome" (SBS) as a condition in which people living indoors experienced acute disease-relevant effects that increased with time of their stay, without specific causes or diseases [161,162]. The syndrome affects people who spend most of their time indoors, often with subliminally elevated CO_2 levels, and are prone to symptoms such as increased heart rate, rise in blood pressure, headaches, fatigue and difficulty concentrating [38,162]. Some of the complaints described in the mask studies we found (Figure 2) are surprisingly similar to those of Sick Building Syndrome [161]. Temperature, carbon dioxide content of the air, headaches, dizziness, drowsiness and itching also play a role in Sick Building Syndrome. On the one hand, masks could themselves be responsible for effects such as those described for Sick Building Syndrome when used for a longer period of time. On the other hand, they could additionally intensify these effects when worn in air-conditioned buildings, especially when masks are mandatory indoors. Nevertheless, there was a tendency towards higher systolic blood pressure values in mask wearers in some studies [21,31,34], but statistical significance was only found in two studies [25,35]. However, we found more relevant and significant evidence of heart

rate increase, headache, fatigue and concentration problems associated with mask wearers (Figure 2) indicating the clinical relevance of wearing masks.

According to the scientific results and findings, masks have measurably harmful effects not only on healthy people, but also on sick people and their relevance is likely to increase with the duration of use [69]. Further research is needed here to shed light on the long-term consequences of widespread mask use with subthreshold hypoxia and hypercapnia in the general population, also regarding possible exacerbating effects on cardiorespiratory lifestyle diseases such as hypertension, sleep apnea and metabolic syndrome. The already often elevated blood carbon dioxide (CO_2) levels in overweight people, sleep apnea patients and patients with overlap-COPD could possibly increase even further with everyday masks. Not only a high body mass index (BMI) but also sleep apnea are associated with hypercapnia during the day in these patients (even without masks) [19,163]. For such patients, hypercapnia means an increase in the risk of serious diseases with increased morbidity, which could then be further increased by excessive mask use [18,38].

The hypercapnia-induced effects of sympathetic stress activation are even cycle phase-dependent in women. Controlled by a progesterone mechanism, the sympathetic reaction, measured by increased blood pressure in the luteal phase, is considerably stronger [164]. This may also result in different sensitivities for healthy and sick women to undesirable effects masks have, which are related to an increase in carbon dioxide (CO_2).

In our review, negative physical and psychological changes caused by masks could be objectified even in younger and healthy individuals.

The physical and chemical parameters did not exceed the normal values in most cases but were statistically significantly measurable ($p < 0.05$) tending towards pathological ranges. They were accompanied by physical impairments (see Figure 2). It is well known that subthreshold stimuli are capable of causing pathological changes when exposed to them for a long time: not only a single high dose of a disturbance, but also a chronically persistent, subthreshold exposure to it often leads to illness [38,46–48,50–54]. The scientifically repeatedly measurable physical and chemical mask effects were often accompanied by typical subjective complaints and pathophysiological phenomena. The fact that these frequently occur simultaneously and together indicates a syndrome under masks.

Figure 2 sums up the significant mask-dependent physiological, psychological, somatic and general pathological changes and their frequent occurrence together is striking. Within the framework of the quantitative evaluation of the experimental studies, we were actually able to prove a statistically significant correlation of the observed side effects of fatigue and oxygen depletion under mask use with $p < 0.05$. In addition, we found a frequent, simultaneous and joint occurrence of further undesirable effects in the scientific studies (Figure 2). Statistically significant associations of such co-occurring, adverse effects have already been described in primary studies [21,29]. We detected a combined occurrence of the physical parameter temperature rise under the mask with the symptom respiratory impairment in seven of the nine studies concerned (88%). We found a similar result for the decrease in oxygen saturation under mask and the symptom respiratory impairment with a simultaneous detection in six of the eight studies concerned (67%). We detected a combined occurrence of carbon dioxide rise under N95 mask use in nine of the 11 scientific papers (82%). We found a similar result for oxygen drop under N95 mask use with simultaneous co-occurrence in eight of 11 primary papers (72%). The use of N95 masks was also associated with headache in six of the 10 primary studies concerned (60%). A combined occurrence of the physical parameters temperature rise and humidity under masks was even found 100% within six of the six studies with significant measurements of these parameters (Figure 2).

Since the symptoms were described in combination in mask wearers and were not observed in isolation in the majority of cases, we refer to them as general Mask-Induced Exhaustion Syndrome (MIES) because of the consistent presentation in numerous papers from different disciplines. These include the following, predominantly statistically significantly

($p < 0.05$) proven pathophysiological changes and subjective complaints, which often occur in combination as described above (see also Section 3.1 to Section 3.11, Figures 2–4):

- Increase in dead space volume [22,24,58,59] (Figure 3, Sections 3.1 and 3.2).
- Increase in breathing resistance [31,35,61,118] (Figure 3, Figure 2: Column 8).
- Increase in blood carbon dioxide [13,15,19,21–28] (Figure 2: Column 5).
- Decrease in blood oxygen saturation [18,19,21,23,28–34] (Figure 2: Column 4).
- Increase in heart rate [15,19,23,29,30,35] (Figure 2: Column 12).
- Decrease in cardiopulmonary capacity [31] (Section 3.2).
- Feeling of exhaustion [15,19,21,29,31–35,69] (Figure 2: Column 14).
- Increase in respiratory rate [15,21,23,34] (Figure 2: Column 9).
- Difficulty breathing and shortness of breath [15,19,21,23,25,29,31,34,35,71,85,101,133] (Figure 2: Column 13).
- Headache [19,27,37,66–68,83] (Figure 2: Column 17).
- Dizziness [23,29] (Figure 2: Column 16).
- Feeling of dampness and heat [15,16,22,29,31,35,85,133] (Figure 2: Column 7).
- Drowsiness (qualitative neurological deficits) [19,29,32,36,37] (Figure 2: Column 15).
- Decrease in empathy perception [99] (Figure 2: Column 19).
- Impaired skin barrier function with acne, itching and skin lesions [37,72,73] (Figure 2: Column 20–22).

It can be deduced from the results that the effects described in healthy people are all more pronounced in sick people, since their compensatory mechanisms, depending on the severity of the illness, are reduced or even exhausted. Some existing studies on and with patients with measurable pathological effects of the masks support this assumption [19,23,25,34]. In most scientific studies, the exposure time to masks in the context of the measurements/investigations was significantly less (in relation to the total wearing and duration of use) than is expected of the general public under the current pandemic regulations and ordinances.

The exposure time limits are little observed or knowingly disregarded in many areas today as already mentioned in Section 3.11 on occupational medicine. The above facts allow the conclusion that the described negative effects of masks, especially in some of our patients and the very elderly, may well be more severe and adverse with prolonged use than presented in some mask studies.

From a doctor's viewpoint, it may also be difficult to advise children and adults who, due to social pressure (to wear a mask) and the desire to feel they belong, suppress their own needs and concerns until the effects of masks have a noticeable negative impact on their health [76]. Nevertheless, the use of masks should be stopped immediately at the latest when shortness of breath, dizziness or vertigo occur [23,25]. From this aspect, it seems sensible for decision makers and authorities to provide information, to define instruction obligations and offer appropriate training for employers, teachers and other persons who have a supervisory or caregiving duty. Knowledge about first aid measures could also be refreshed and expanded accordingly in this regard.

Elderly, high-risk patients with lung disease, cardiac patients, pregnant women or stroke patients are advised to consult a physician to discuss the safety of an N95 mask as their lung volume or cardiopulmonary performance may be reduced [23]. A correlation between age and the occurrence of the aforementioned symptoms while wearing a mask has been statistically proven [19]. Patients with reduced cardiopulmonary function are at increased risk of developing serious respiratory failure with mask use according to the referenced literature [34]. Without the possibility of continuous medical monitoring, it can be concluded that they should not wear masks without close monitoring. The American Asthma and Allergy Society has already advised caution in the use of masks with regard to the COVID-19 pandemic for people with moderate and severe lung disease [165]. Since the severely overweight, sleep apnea patients and overlap-COPD sufferers are known to be prone to hypercapnia, they also represent a risk group for serious adverse health effects under extensive mask use [163]. This is because the potential of masks to produce additional

CO₂ retention may not only have a disruptive effect on the blood gases and respiratory physiology of sufferers, but may also lead to further serious adverse health effects in the long term. Interestingly, in an animal experiment an increase in CO₂ with hypercapnia leads to contraction of smooth airway muscles with constriction of bronchi [166]. This effect could explain the observed pulmonary decompensations of patients with lung disease under masks (Section 3.2) [23,34].

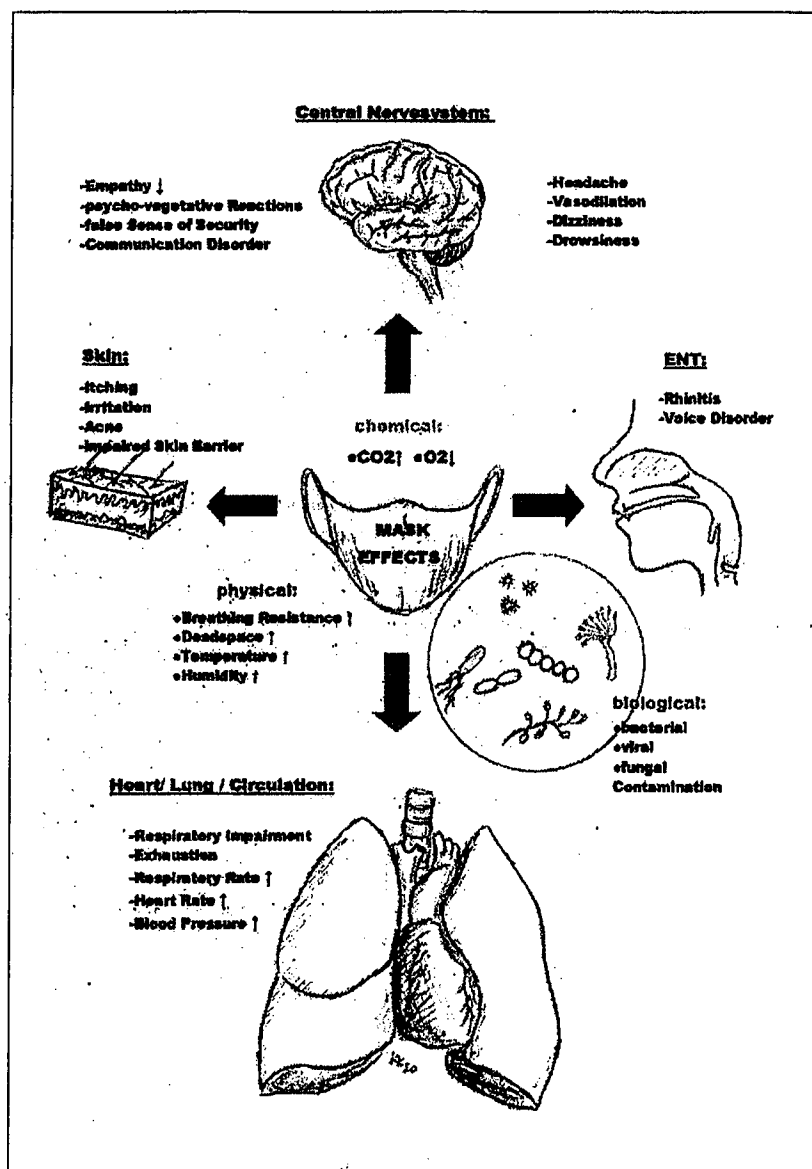


Figure 4. Unfavorable mask effects as components of Mask-Induced Exhaustion Syndrome (MIES). The chemical, physical and biological effects, as well as the organ system consequences mentioned, are all documented with statistically significant results in the scientific literature found (Figure 2). The term drowsiness is used here to summarize any qualitative neurological deficits described in the examined scientific literature.

Patients with renal insufficiency requiring dialysis are, according to the literature available, further candidates for a possible exemption from the mask requirement [34].

According to the criteria of the Centers for Disease Control and Prevention, GA, USA (CDC), sick and helpless people who cannot remove a mask on their own should be exempted from the mask requirement [82].

Since it can be assumed that children react even more sensitively to masks, the literature suggests that masks are a contraindication for children with epilepsies (hyperventilation as a trigger for seizures) [63]. In the field of pediatrics, special attention should also be paid to the mask symptoms described under psychological, psychiatric and sociological effects with possible triggering of panic attacks by CO₂ rebreathing in the case of predisposition and also reinforcement of claustrophobic fears [77–79,167]. The mask-related disturbance of verbal [43,45,71] and non-verbal communication and, thus, of social interaction is particularly serious for children. Masks restrict social interaction and block positive perceptions (smiling and laughing) and emotional mimicry [42]. The proven mask-induced mild to moderate cognitive impairment with impaired thinking, decreased attention and dizziness [19,23,29,32,36,37,39–41,69], as well as the psychological and neurological effects [135], should be additionally taken into account when masks are compulsory at school and in the vicinity of both public and non-public transport, also regarding the possibility of an increased risk of accidents (see also occupational health side effects and hazards) [19,29,32,36,37]. The exclusion criteria mentioned in pediatric studies on masks (see pediatric impairments, Section 3.14) [26,133] should also apply to an exclusion of these children from the general mask obligation in accordance with the scientific findings for the protection of the sick children concerned. The long-term sociological, psychological and educational consequences of a comprehensive masking requirement extended to schools are also unpredictable with regard to the psychological and physical development of healthy children [42,135]. Interestingly, according to the Corona Thesis Paper of the University of Bremen children “are infected less often, they become ill less often, the lethality is close to zero, and they also pass on the infection less often”, according to the Thesis Paper 2.0 of the German University of Bremen on page 6 [138]. Studies conducted under real-life conditions with outcome endpoints showing hardly any infections, hardly any morbidity, hardly any mortality and only low contagiousness in children are clearly in the majority, according to Thesis Paper 3.0 of the German University of Bremen [138]. A recent German observational study (5600 reporting pediatricians) also showed a surprisingly low incidence of COVID-19 disease in children [168]. The infection of adults with SARS-CoV-2 by children has been considered in only one suspected case, but could not be proven with certainty, since the parents also had numerous contacts and exposure factors for viral infections due to their occupation. In this case, the circulating headlines in the public media that children contribute more to the incidence of infection are to be regarded as anecdotal.

In pregnant women, the use of masks during exertion or at rest over long periods of time is to be regarded as critical as little research has been done on this [20]. If there is clear scientific evidence of increased dead space ventilation with possible accumulation of CO₂ in the mother’s blood, the use of masks by pregnant women for more than 1 h, as well as under physical stress, should be avoided in order to protect the unborn child [20,22]. The hypercapnia-promoting masks could act as a confounder of the fetal/maternal CO₂ gradient in this case (Section 3.6) [20,22,28].

According to the literature cited in the Section 3.5 on psychiatric side effects (personality disorders with anxiety and panic attacks, claustrophobia, dementia and schizophrenia), masking should only be done, if at all, with careful consideration of the advantages and disadvantages. Attention should be paid to possible provocation of the number and severity of panic attacks [77–79].

In patients with headaches, a worsening of symptoms can be expected with prolonged mask use (see also Section 3.3., neurological side effects) [27,66–68]. As a result of the increase in blood carbon dioxide (CO₂) when the mask is used, vasodilatation occurs in the central nervous system and the pulsation of the blood vessels decreases [27]. In this connection, it is also interesting to note radiological experiments that demonstrate an increase in brain volume under subthreshold, but still within normal limits of CO₂ increase

in the blood by means of structural MRI. The blood carbon dioxide increase was produced in seven subjects via rebreathing with resulting median carbon dioxide concentration of 42 mmHg and an interquartile range of 39.44 mmHg, corresponding to only a subthreshold increase given the normal values of 32–45 mmHg. In the experiment, there was a significant increase in brain parenchymal volume measurable under increased arterial CO₂ levels ($p < 0.02$), with a concomitant decrease in CSF spaces ($p < 0.04$), entirely in accordance with the Monroe–Kelly doctrine, according to which the total volume within the skull always remains the same. The authors interpreted the increase in brain volume as an expression of an increase in blood volume due to a CO₂ increase-induced dilation of the cerebral vessels [169]. The consequences of such equally subthreshold carbon dioxide (CO₂) increases even under masks [13,15,18,19,22,23,25] are unclear for people with pathological changes inside the skull (aneurysms, tumors, etc.) with associated vascular changes [27] and brain volume shifts [169] especially due to longer exposure while wearing a mask, but could be of great relevance due to the blood gas-related volume shifts that take place.

In view of the increased dead space volume, the long-term and increased accumulation and rebreathing of other respiratory air components apart from CO₂ is also unexplained, both in children and in old and sick people. Exhaled air contains over 250 substances, including irritant or toxic gases such as nitrogen oxides (NO), hydrogen sulfide (H₂S), isoprene and acetone [170]. For nitrogen oxides [47] and hydrogen sulfide [46], pathological effects relevant to disease have been described in environmental medicine even at a low but chronic exposure [46–48]. Among the volatile organic compounds in exhaled air, acetone and isoprene dominate in terms of quantity, but allyl methyl sulfide, propionic acid and ethanol (some of bacterial origin) should also be mentioned [171]. Whether such substances also react chemically with each other underneath masks and in the dead space volume created by masks (Figure 3), and with the mask tissue itself, and in what quantities these and possible reaction products are rebreathed, has not yet been clarified. In addition to the blood gas changes described above (O₂ drop and CO₂ rise), these effects could also play a role with regard to undesirable mask effects. Further research is needed here and is of particular interest in the case of prolonged and ubiquitous use of masks.

The WHO sees the integration of individual companies and communities that produce their own fabric masks as a potential social and economic benefit. Due to the global shortage of surgical masks and personal protective equipment, it sees this as a source of income and points out that the reuse of fabric masks can reduce costs and waste and contribute to sustainability [2]. In addition to the question of certification procedures for such fabric masks, it should also be mentioned that due to the extensive mask obligation, textile (artificial) substances in the form of micro- and nanoparticles, some of which cannot be degraded in the body, are chronically absorbed into the body through inhalation to an unusual extent. In the case of medical masks, disposable polymers such as polypropylene, polyurethane, polyacrylonitrile, polystyrene, polycarbonate, polyethylene and polyester should be mentioned [140]. ENT physicians have already been able to detect such particles in the nasal mucosa of mask wearers with mucosal reactions in the sense of a foreign body reaction with rhinitis [96]. In the case of community masks, other substances from the textile industry are likely to be added to those mentioned above. The body will try to absorb these substances through macrophages and scavenger cells in the respiratory tract and alveoli as part of a foreign body reaction, whereby toxin release and corresponding local and generalized reactions may occur in an unsuccessful attempt to break them down [172]. Extensive respiratory protection in permanent long-term use (24/7), at least from a theoretical point of view, also potentially carries the risk of leading to a mask-related pulmonary [47] or even generalized disorder, as is already known from textile workers chronically exposed to organic dusts in the Third World (byssinosis) [172].

For the general public, from a scientific angle, it is necessary to draw on the long-standing knowledge of respiratory protection in occupational medicine in order to protect children in particular from harm caused by uncertified masks and improper use.

The universal undefined and extended mask requirement—without taking into account multiple predispositions and susceptibilities—contradicts the claim of an increasingly important individualized medicine with a focus on the unique characteristics of each individual [173].

A systematic review on the topic of masks is necessary according to the results of our scoping review. The primary studies often showed weaknesses in operationalization, especially in the evaluation of cognitive and neuropsychological parameters. Computerized test procedures will be useful here in the future. Mask research should also set itself the future goal of investigating and defining subgroups for whom respiratory protection use is particularly risky.

5. Limitations

Our approach with a focus on negative effects is in line with Villalonga-Olives and Kawachi [12]. With the help of such selective questioning in the sense of dialectics, new insights can be gained that might otherwise have remained hidden. Our literature search focused on adverse negative effects of masks, in particular to point out risks especially for certain patient groups. Therefore, publications presenting only positive effects of masks were not considered in this review.

For a compilation of studies with harmless results when using masks, reference must, therefore, be made to reviews with a different research objective, whereby attention must be paid to possible conflicts of interest there. Some of the studies excluded by us lacking negative effects have shown methodological weaknesses (small, non-uniform experimental groups, missing control group even without masks due to corona constraints, etc.) [174]. In other words, if no negative concomitant effects were described in publications, it does not necessarily mean that masks have exclusively positive effects. It is quite possible that negative effects were simply not mentioned in the literature and the number of negative effects may well be higher than our review suggests.

We only searched one database, so the number of papers on negative mask effects may be higher than we reported.

In order to be able to describe characteristic effects for each mask type even more extensively, we did not have enough scientific data on the respective special designs of the masks. There is still a great need for research in this area due to the current pandemic situation with extensive mandatory masking.

In addition, the experiments evaluated in this paper do not always have uniform measurement parameters and study variables and, depending on the study, take into account the effect of masks at rest or under stress with subjects having different health conditions. Figure 2, therefore, represents a compromise. The results of the primary studies on mask use partially showed no natural variation in parameters, but often showed such clear correlations between symptoms and physiological changes, so that a statistical correlation analysis was not always necessary. We found a statistically significant correlation of oxygen deprivation and fatigue in 58% of the studies ($p < 0.05$). A statistically significant correlation evidence for other parameters has been previously demonstrated in primary studies [21,29].

The most commonly used personal particulate matter protective equipment in the COVID-19 pandemic is the N95 mask [23]. Due to its characteristics (better filtering function, but greater airway resistance and more dead space volume than other masks), the N95 mask is able to highlight negative effects of such protective equipment more clearly than others (Figure 3). Therefore, a relatively frequent consideration and evaluation of N95 masks within the studies found (30 of the 44 quantitatively evaluated studies, 68%) is even advantageous within the framework of our research question. Nevertheless, it remains to be noted that the community masks sold on the market are increasingly similar to the protective equipment that has been better investigated in scientific studies, such as surgical masks and N95 masks, since numerous manufacturers and users of community masks are striving to approximate the professional standard (surgical mask, N95/FFP2). Recent

study results on community masks indicate similar effects for respiratory physiology as described for medical masks: in a recent publication, fabric masks (community masks) also provoked a measurable increase in carbon dioxide P_{tCO_2} in wearers during exertion and came very close to surgical masks in this effect [21].

Most of the studies cited in our paper included only short observation and application periods (mask-wearing durations investigated ranged from 5 min [26] to 12 h [19]. In only one study, a maximum observation period of an estimated 2-month period was chosen [37]. Therefore, the actual negative effects of masks over a longer application period might be more pronounced than presented in our work.

6. Conclusions

On the one hand, the advocacy of an extended mask requirement remains predominantly theoretical and can only be sustained with individual case reports, plausibility arguments based on model calculations and promising in vitro laboratory tests. Moreover, recent studies on SARS-CoV-2 show both a significantly lower infectivity [175] and a significantly lower case mortality than previously assumed, as it could be calculated that the median corrected infection fatality rate (IFR) was 0.10% in locations with a lower than average global COVID-19 population mortality rate [176]. In early October 2020, the WHO also publicly announced that projections show COVID-19 to be fatal for approximately 0.14% of those who become ill—compared to 0.10% for endemic influenza—again a figure far lower than expected [177].

On the other hand, the side effects of masks are clinically relevant.

In our work, we focused exclusively on the undesirable and negative side effects that can be produced by masks. Valid significant evidence of combined mask-related changes were objectified ($p < 0.05$, $n \geq 50\%$), and we found a clustered and common occurrence of the different adverse effects within the respective studies with significantly measured effects (Figure 2). We were able to demonstrate a statistically significant correlation of the observed adverse effect of hypoxia and the symptom of fatigue with $p < 0.05$ in the quantitative evaluation of the primary studies. Our review of the literature shows that both healthy and sick people can experience Mask-Induced Exhaustion Syndrome (MIES), with typical changes and symptoms that are often observed in combination, such as an increase in breathing dead space volume [22,24,58,59], increase in breathing resistance [31,35,60,61], increase in blood carbon dioxide [13,15,17,19,21–30,35], decrease in blood oxygen saturation [18,19,21,23,28–34], increase in heart rate [23,29,30,35], increase in blood pressure [25,35], decrease in cardiopulmonary capacity [31], increase in respiratory rate [15,21,23,34,36], shortness of breath and difficulty breathing [15,17,19,21,23,25,29,31,34,35,60,71,85,101,133], headache [19,27,29,37,66–68,71,83], dizziness [23,29], feeling hot and clammy [17,22,29,31,35,44,71,85,133], decreased ability to concentrate [29], decreased ability to think [36,37], drowsiness [19,29,32,36,37], decrease in empathy perception [99], impaired skin barrier function [37,72,73] with itching [31,35,67,71–73,91–93], acne, skin lesions and irritation [37,72,73], overall perceived fatigue and exhaustion [15,19,21,29,31,32,34,35,69] (Figures 2–4).

Wearing masks does not consistently cause clinical deviations from the norm of physiological parameters, but according to the scientific literature, a long-term pathological consequence with clinical relevance is to be expected, owing to a longer-lasting effect with a subliminal impact and significant shift in the pathological direction. For changes that do not exceed normal values, but are persistently recurring, such as an increase in blood carbon dioxide [38,160], an increase in heart rate [55] or an increase in respiratory rate [56,57], which have been documented while wearing a mask [13,15,17,19,21–30,34,35] (Figure 2), a long-term generation of high blood pressure [25,35], arteriosclerosis and coronary heart disease and of neurological diseases is scientifically obvious [38,55–57,160]. This pathogenetic damage principle with a chronic low-dose exposure with long-term effect, which leads to disease or disease-relevant conditions, has already been extensively studied and described in many areas of environmental medicine [38,46–54]. Extended

mask-wearing would have the potential, according to the facts and correlations we have found, to cause a chronic sympathetic stress response induced by blood gas modifications and controlled by brain centers. This in turn induces and triggers immune suppression and metabolic syndrome with cardiovascular and neurological diseases.

We not only found evidence in the reviewed mask literature of potential long-term effects, but also evidence of an increase in direct short-term effects with increased mask-wearing time in terms of cumulative effects for: carbon dioxide retention, drowsiness, headache, feeling of exhaustion, skin irritation (redness, itching) and microbiological contamination (germ colonization) [19,22,37,66,68,69,89,91,92].

Overall, the exact frequency of the described symptom constellation MIES in the mask-using populace remains unclear and cannot be estimated due to insufficient data.

Theoretically, the mask-induced effects of the drop in blood gas oxygen and increase in carbon dioxide extend to the cellular level with induction of the transcription factor HIF (hypoxia-induced factor) and increased inflammatory and cancer-promoting effects [160] and can, thus, also have a negative influence on pre-existing clinical pictures.

In any case, the MIES potentially triggered by masks (Figures 3 and 4) contrasts with the WHO definition of health: "health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity." [178].

All the scientific facts found in our work expand the knowledge base for a differentiated view of the mask debate. This gain can be relevant for decision makers who have to deal with the issue of mandatory mask use during the pandemic under constant review of proportionality as well as for physicians who can advise their patients more appropriately on this basis. For certain diseases, taking into account the literature found in this study, it is also necessary for the attending physician to weigh up the benefits and risks with regard to a mask obligation. With an overall strictly scientific consideration, a recommendation for mask exemption can become justifiable within the framework of a medical appraisal (Figure 5).

Increased risk of adverse effects when using masks:		
<u>Internal diseases</u> COPD Sleep Apnea Syndrome advanced renal Failure Obesity Cardiopulmonary Dysfunction Asthma	<u>Psychiatric illness</u> Claustrophobia Panic Disorder Personality Disorders Dementia Schizophrenia helpless Patients fixed and sedated Patients	<u>Neurological Diseases</u> Migraines and Headache Sufferers Patients with Intracranial Masses Epilepsy
<u>Pediatric Diseases</u> Asthma Respiratory diseases Cardiopulmonary Diseases Neuromuscular Diseases Epilepsy	<u>ENT Diseases</u> Vocal Cord Disorders Rhinitis and obstructive Diseases <u>Dermatological Diseases</u> Acne Atopic	<u>Occupational Health Restrictions</u> moderate / heavy physical Work <u>Gynecological restrictions</u> Pregnant Women

Figure 5. Diseases/predispositions with significant risks, according to the literature found, when using masks. Indications for weighing up medical mask exemption certificates.

In addition to protecting the health of their patients, doctors should also base their actions on the guiding principle of the 1948 Geneva Declaration, as revised in 2017. According to this, every doctor vows to put the health and dignity of his patient first and, even under threat, not to use his medical knowledge to violate human rights and civil liberties [9]. Within the framework of these findings, we, therefore, propagate an explicitly medically judicious, legally compliant action in consideration of scientific factual reality [2,4,5,16,130,132,143,175–177] against a predominantly assumption-led claim to a general effectiveness of masks, always taking into account possible unwanted individual ef-

fects for the patient and mask wearer concerned, entirely in accordance with the principles of evidence-based medicine and the ethical guidelines of a physician.

The results of the present literature review could help to include mask-wearing in the differential diagnostic pathophysiological cause consideration of every physician when corresponding symptoms are present (MIES, Figure 4). In this way, the physician can draw on an initial complaints catalogue that may be associated with mask-wearing (Figure 2) and also exclude certain diseases from the general mask requirement (Figure 5).

For scientists, the prospect of continued mask use in everyday life suggests areas for further research. In our view, further research is particularly desirable in the gynecological (fetal and embryonic) and pediatric fields, as children are a vulnerable group that would face the longest and, thus, most profound consequences of a potentially risky mask use. Basic research at the cellular level regarding mask-induced triggering of the transcription factor HIF with potential promotion of immunosuppression and carcinogenicity also appears to be useful under this circumstance. Our scoping review shows the need for a systematic review.

The described mask-related changes in respiratory physiology can have an adverse effect on the wearer's blood gases sub-clinically and in some cases also clinically manifest and, therefore, have a negative effect on the basis of all aerobic life, external and internal respiration, with an influence on a wide variety of organ systems and metabolic processes with physical, psychological and social consequences for the individual human being.

Author Contributions: Conceptualization, K.K. and O.H.; methodology, K.K. and O.H.; software, O.H.; formal analysis, K.K., O.H., P.G., A.P., B.K., D.G., S.F. and O.K.; investigation, K.K., O.H., P.G., A.P., B.K., D.G., S.F. and O.K.; writing—original draft preparation, K.K., O.H., P.G., A.P., B.K., D.G., S.F. and O.K.; writing—review and editing K.K., O.H., P.G., A.P., B.K., D.G., S.F. and O.K. All authors have read and agreed to the published version of the manuscript.

Funding: This research received no external funding.

Institutional Review Board Statement: Not applicable.

Informed Consent Statement: Not applicable.

Data Availability Statement: Not applicable.

Acknowledgments: We thank Bonita Blankart, for translation of the manuscript. For support in their special field we wish to thank: Tanja Boehnke (Psychology), Nicola Fels (Pediatrics), Michael Grönke (Anesthesiology), Basile Marços (Psychiatry), Bartholomeus Maris (Gynecology) and Markus Veit (Pharmacist).

Conflicts of Interest: The authors declare no conflict of interest.

References

1. World Health Organization. *WHO-Advice on the Use of Masks in the Context of COVID-19: Interim Guidance*, 6 April 2020; World Health Organization: Geneva, Switzerland, 2020; Available online: <https://apps.who.int/iris/handle/10665/331693> (accessed on 7 November 2020).
2. World Health Organization. *WHO-Advice on the Use of Masks in the Context of COVID-19: Interim Guidance*, 5 June 2020; World Health Organization: Geneva, Switzerland, 2020; Available online: <https://apps.who.int/iris/handle/10665/332293> (accessed on 7 November 2020).
3. Chu, D.K.; Akl, E.A.; Duda, S.; Solo, K.; Yaacoub, S.; Schünemann, H.J.; Chu, D.K.; Akl, E.A.; El-harakeh, A.; Bognanni, A.; et al. Physical Distancing, Face Masks, and Eye Protection to Prevent Person-to-Person Transmission of SARS-CoV-2 and COVID-19: A Systematic Review and Meta-Analysis. *Lancet* 2020, 395, 1973–1987. [CrossRef]
4. Jefferson, T.; Jones, M.; Ansari, L.A.A.; Bawazeer, G.; Beller, E.; Clark, J.; Conly, J.; Mar, C.D.; Dooley, E.; Ferroni, E.; et al. Physical Interventions to Interrupt or Reduce the Spread of Respiratory Viruses. Part 1-Face Masks, Eye Protection and Person Distancing: Systematic Review and Meta-Analysis. *medRxiv* 2020. [CrossRef]
5. Kappstein, I. Mund-Nasen-Schutz in der Öffentlichkeit: Keine Hinweise für eine Wirksamkeit. *Krankenh. Up2date* 2020, 15, 279–295. [CrossRef]
6. De Brouwer, C. Wearing a Mask, a Universal Solution against COVID-19 or an Additional Health Risk? 2020. Available online: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3676885 (accessed on 12 November 2020). [CrossRef]
7. Ewig, S.; Gatermann, S.; Lemmen, S. Die Maskierte Gesellschaft. *Pneumologie* 2020, 74, 405–408. [CrossRef] [PubMed]

8. Great Barrington Declaration Great Barrington Declaration and Petition. Available online: <https://gbdeclaration.org/> (accessed on 9 November 2020).
9. WMA-The World Medical Association-WMA Declaration of Geneva. Available online: <https://www.wma.net/policies-post/wma-declaration-of-geneva/> (accessed on 7 November 2020).
10. WMA-The World Medical Association-WMA Declaration of Helsinki—Ethical Principles for Medical Research Involving Human Subjects. Available online: <https://www.wma.net/policies-post/wma-declaration-of-geneva/> (accessed on 7 November 2020).
11. WMA-The World Medical Association-WMA Declaration of Lisbon on the Rights of the Patient. Available online: <https://www.wma.net/policies-post/wma-declaration-of-lisbon-on-the-rights-of-the-patient/> (accessed on 7 November 2020).
12. Villalonga-Olives, E.; Kawachi, I. The Dark Side of Social Capital: A Systematic Review of the Negative Health Effects of Social Capital. *Soc. Sci. Med.* **2017**, *194*, 105–127. [CrossRef]
13. Butz, U. Rückatmung von Kohlendioxid bei Verwendung von Operationsmasken als hygienischer Mundschutz an medizinischem Fachpersonal. Ph.D. Thesis, Fakultät für Medizin der Technischen Universität München, Munich, Germany, 2005.
14. Smolka, L.; Borkowski, J.; Zaton, M. The Effect of Additional Dead Space on Respiratory Exchange Ratio and Carbon Dioxide Production Due to Training. *J. Sports Sci. Med.* **2014**, *13*, 36–43. [PubMed]
15. Roberge, R.J.; Kim, J.-H.; Benson, S.M. Absence of Consequential Changes in Physiological, Thermal and Subjective Responses from Wearing a Surgical Mask. *Respir. Physiol. Neurobiol.* **2012**, *181*, 29–35. [CrossRef] [PubMed]
16. Matuschek, C.; Moll, F.; Fangerau, H.; Fischer, J.C.; Zänker, K.; van Griensven, M.; Schneider, M.; Kindgen-Milles, D.; Knoefel, W.T.; Lichtenberg, A.; et al. Face Masks: Benefits and Risks during the COVID-19 Crisis. *Eur. J. Med. Res.* **2020**, *25*, 32. [CrossRef]
17. Roberge, R.J.; Coca, A.; Williams, W.J.; Powell, J.B.; Palmiero, A.J. Physiological Impact of the N95 Filtering Facepiece Respirator on Healthcare Workers. *Respir. Care* **2010**, *55*, 569–577.
18. Pifarré, F.; Zabalá, D.D.; Grazioli, G.; de Yzaguirre, I.; Maura, I. COVID 19 and Mask in Sports. *Apunt. Sports Med.* **2020**. [CrossRef]
19. Rebmann, T.; Carrico, R.; Wang, J. Physiologic and Other Effects and Compliance with Long-Term Respirator Use among Medical Intensive Care Unit Nurses. *Am. J. Infect. Control* **2013**, *41*, 1218–1223. [CrossRef]
20. Roeckner, J.T.; Krstić, N.; Sipe, B.H.; Običan, S.G. N95 Filtering Facepiece Respirator Use during Pregnancy: A Systematic Review. *Am. J. Perinatol.* **2020**, *37*, 995–1001. [CrossRef]
21. Georgi, C.; Haase-Fielitz, A.; Meretz, D.; Gäsert, L.; Butter, C. Einfluss gängiger Gesichtsmasken auf physiologische Parameter und Belastungsempfinden unter arbeitstypischer körperlicher Anstrengung. *Deutsches Ärzteblatt* **2020**, 674–675. [CrossRef]
22. Roberge, R.J.; Kim, J.-H.; Powell, J.B. N95 Respirator Use during Advanced Pregnancy. *Am. J. Infect. Control* **2014**, *42*, 1097–1100. [CrossRef]
23. Kyung, S.Y.; Kim, Y.; Hwang, H.; Park, J.-W.; Jeong, S.H. Risks of N95 Face Mask Use in Subjects with COPD. *Respir. Care* **2020**, *65*, 658–664. [CrossRef]
24. Epstein, D.; Korytny, A.; Isenberg, Y.; Marcusohn, E.; Zukermann, R.; Bishop, B.; Minha, S.; Raz, A.; Miller, A. Return to Training in the COVID-19 Era: The Physiological Effects of Face Masks during Exercise. *Scand. J. Med. Sci. Sports* **2020**. [CrossRef]
25. Mo, Y.; Wei, D.; Mai, Q.; Chen, C.; Yu, H.; Jiang, C.; Tan, X. Risk and Impact of Using Mask on COPD Patients with Acute Exacerbation during the COVID-19 Outbreak: A Retrospective Study. *Res. Sq.* **2020**. [CrossRef]
26. Goh, D.Y.T.; Mun, M.W.; Lee, W.L.J.; Teoh, O.H.; Rajgor, D.D. A Randomised Clinical Trial to Evaluate the Safety, Fit, Comfort of a Novel N95 Mask in Children. *Sci. Rep.* **2019**, *9*, 18952. [CrossRef]
27. Bharatendu, C.; Ong, J.J.Y.; Goh, Y.; Tan, B.Y.Q.; Chan, A.C.Y.; Tang, J.Z.Y.; Leow, A.S.; Chin, A.; Sooi, K.W.X.; Tan, Y.L.; et al. Powered Air Purifying Respirator (PAPR) Restores the N95 Face Mask Induced Cerebral Hemodynamic Alterations among Healthcare Workers during COVID-19 Outbreak. *J. Neurol. Sci.* **2020**, *417*, 117078. [CrossRef]
28. Tong, P.S.Y.; Kale, A.S.; Ng, K.; Loke, A.P.; Choolani, M.A.; Lim, C.L.; Chan, Y.H.; Chong, Y.S.; Tambyah, P.A.; Yong, E.-L. Respiratory Consequences of N95-Type Mask Usage in Pregnant Healthcare Workers—A Controlled Clinical Study. *Antimicrob. Resist. Infect. Control* **2015**, *4*, 48. [CrossRef]
29. Liu, C.; Li, G.; He, Y.; Zhang, Z.; Ding, Y. Effects of Wearing Masks on Human Health and Comfort during the COVID-19 Pandemic. *IOP Conf. Ser. Earth Environ. Sci.* **2020**, *531*, 012034. [CrossRef]
30. Beder, A.; Büyükoçak, U.; Sabuncuoğlu, H.; Keskil, Z.A.; Keskil, S. Preliminary Report on Surgical Mask Induced Deoxygenation during Major Surgery. *Neurocirugía* **2008**, *19*, 121–126. [CrossRef]
31. Fikenzer, S.; Uhe, T.; Lavall, D.; Rudolph, U.; Falz, R.; Busse, M.; Hepp, P.; Laufs, U. Effects of Surgical and FFP2/N95 Face Masks on Cardiopulmonary Exercise Capacity. *Clin. Res. Cardiol.* **2020**, *109*, 1522–1530. [CrossRef] [PubMed]
32. Jagim, A.R.; Dominy, T.A.; Camic, C.L.; Wright, G.; Doberstein, S.; Jones, M.T.; Oliver, J.M. Acute Effects of the Elevation Training Mask on Strength Performance in Recreational Weight Lifters. *J. Strength Cond. Res.* **2018**, *32*, 482–489. [CrossRef]
33. Porcari, J.P.; Probst, L.; Forrester, K.; Doberstein, S.; Foster, C.; Cress, M.L.; Schmidt, K. Effect of Wearing the Elevation Training Mask on Aerobic Capacity, Lung Function, and Hematological Variables. *J. Sports Sci. Med.* **2016**, *15*, 379–386.
34. Kao, T.-W.; Huang, K.-C.; Huang, Y.-L.; Tsai, T.-J.; Hsieh, B.-S.; Wu, M.-S. The Physiological Impact of Wearing an N95 Mask during Hemodialysis as a Precaution against SARS in Patients with End-Stage Renal Disease. *J. Formos. Med. Assoc.* **2004**, *103*, 624–628.
35. Li, Y.; Tokura, H.; Guo, Y.P.; Wong, A.S.W.; Wong, T.; Chung, J.; Newton, E. Effects of Wearing N95 and Surgical Facemasks on Heart Rate, Thermal Stress and Subjective Sensations. *Int. Arch. Occup. Environ. Health* **2005**, *78*, 501–509. [CrossRef]
36. Johnson, A.T. Respirator Masks Protect Health but Impact Performance: A Review. *J. Biol. Eng.* **2016**, *10*, 4. [CrossRef]

37. Rosner, E. Adverse Effects of Prolonged Mask Use among Healthcare Professionals during COVID-19. *J. Infect. Dis. Epidemiol.* 2020. [CrossRef]
38. Azuma, K.; Kagi, N.; Yanagi, U.; Osawa, H. Effects of Low-Level Inhalation Exposure to Carbon Dioxide in Indoor Environments: A Short Review on Human Health and Psychomotor Performance. *Environ. Int.* 2018, 121, 51–56. [CrossRef]
39. Drechsler, M.; Morris, J. Carbon Dioxide Narcosis. In *StatPearls*; StatPearls Publishing: Treasure Island, FL, USA, 2020.
40. Noble, J.; Jones, J.G.; Davis, E.J. Cognitive Function during Moderate Hypoxaemia. *Anaesth. Intensive Care* 1993, 21, 180–184. [CrossRef]
41. Fothergill, D.M.; Hedges, D.; Morrison, J.B. Effects of CO₂ and N₂ Partial Pressures on Cognitive and Psychomotor Performance. *Undersea Biomed. Res.* 1991, 18, 1–19.
42. Spitzer, M. Masked Education? The Benefits and Burdens of Wearing Face Masks in Schools during the Current Corona Pandemic. *Trends Neurosci. Educ.* 2020, 20, 100138. [CrossRef]
43. Heider, C.A.; Álvarez, M.L.; Fuentes-López, E.; González, C.A.; León, N.I.; Verástegui, D.C.; Badía, P.I.; Napolitano, C.A. Prevalence of Voice Disorders in Healthcare Workers in the Universal Masking COVID-19 Era. *Laryngoscope* 2020. [CrossRef]
44. Roberge, R.J.; Kim, J.-H.; Coca, A. Protective Facemask Impact on Human Thermoregulation: An Overview. *Ann. Occup. Hyg.* 2012, 56, 102–112. [CrossRef]
45. Palmiero, A.J.; Symons, D.; Morgan, J.W.; Shaffer, R.E. Speech Intelligibility Assessment of Protective Facemasks and Air-Purifying Respirators. *J. Occup. Environ. Hyg.* 2016, 13, 960–968. [CrossRef]
46. Simonton, D.; Spears, M. Human Health Effects from Exposure to Low-Level Concentrations of Hydrogen Sulfide. *Occup. Health Saf. (Waco Tex.)* 2007, 76, 102–104.
47. Salimi, F.; Morgan, G.; Rolfe, M.; Samoli, E.; Cowie, C.T.; Harigan, I.; Knibbs, L.; Cope, M.; Johnston, F.H.; Guo, Y.; et al. Long-Term Exposure to Low Concentrations of Air Pollutants and Hospitalisation for Respiratory Diseases: A Prospective Cohort Study in Australia. *Environ. Int.* 2018, 121, 415–420. [CrossRef]
48. Dominici, F.; Schwartz, J.; Di, Q.; Braun, D.; Choirat, C.; Zanobetti, A. *Assessing Adverse Health Effects of Long-Term Exposure to Low Levels of Ambient Air Pollution: Phase 1 Research Report*; Health Effects Institute: Boston, MA, USA, 2019; pp. 1–51.
49. Alleva, R.; Manzella, N.; Gaetani, S.; Bacchetti, T.; Bracci, M.; Ciarapica, V.; Monaco, F.; Borghi, B.; Amati, M.; Ferretti, G.; et al. Mechanism Underlying the Effect of Long-Term Exposure to Low Dose of Pesticides on DNA Integrity. *Environ. Toxicol.* 2018, 33, 476–487. [CrossRef]
50. Roh, T.; Lynch, C.R.; Weyer, P.; Wang, K.; Kelly, K.M.; Ludewig, G. Low-Level Arsenic Exposure from Drinking Water Is Associated with Prostate Cancer in Iowa. *Environ. Res.* 2017, 159, 338–343. [CrossRef]
51. Deering, K.B.; Callan, A.C.; Prince, R.L.; Lim, W.H.; Thompson, P.L.; Lewis, J.R.; Hinwood, A.L.; Devine, A. Low-Level Cadmium Exposure and Cardiovascular Outcomes in Elderly Australian Women: A Cohort Study. *Int. J. Hyg. Environ. Health* 2018, 221, 347–354. [CrossRef] [PubMed]
52. Kosnett, M. Health Effects of Low Dose Lead Exposure in Adults and Children, and Preventable Risk Posed by the Consumption of Game Meat Harvested with Lead Ammunition. In *Ingestion of Lead from Spent Ammunition: Implications for Wildlife and Humans*; The Peregrine Fund: Boise, ID, USA, 2009. [CrossRef]
53. Crinnion, W.J. Environmental Medicine, Part Three: Long-Term Effects of Chronic Low-Dose Mercury Exposure. *Altern. Med. Rev.* 2000, 5, 209–223. [PubMed]
54. Wu, S.; Han, J.; Vleugels, R.A.; Puett, R.; Laden, F.; Hunter, D.J.; Qureshi, A.A. Cumulative Ultraviolet Radiation Flux in Adulthood and Risk of Incident Skin Cancers in Women. *Br. J. Cancer* 2014, 110, 1855–1861. [CrossRef] [PubMed]
55. Custodis, F.; Schirmer, S.H.; Baumhäkel, M.; Heusch, G.; Böhm, M.; Laufs, U. Vascular Pathophysiology in Response to Increased Heart Rate. *J. Am. Coll. Cardiol.* 2010, 56, 1973–1983. [CrossRef]
56. Russo, M.A.; Santarelli, D.M.; O'Rourke, D. The Physiological Effects of Slow Breathing in the Healthy Human. *Breathe* 2017, 13, 298–309. [CrossRef]
57. Nuckowska, M.K.; Gruszecki, M.; Kot, J.; Wolf, J.; Guminski, W.; Frydrychowski, A.F.; Wtorek, J.; Narkiewicz, K.; Winklewski, P.J. Impact of Slow Breathing on the Blood Pressure and Subarachnoid Space Width Oscillations in Humans. *Sci. Rep.* 2019, 9, 6232. [CrossRef]
58. Johnson, A.T.; Scott, W.H.; Lausted, C.G.; Coyne, K.M.; Sahota, M.S.; Johnson, M.M. Effect of External Dead Volume on Performance While Wearing a Respirator. *AIHAJ-Am. Ind. Hyg. Assoc.* 2000, 61, 678–684. [CrossRef]
59. Xu, M.; Lei, Z.; Yang, J. Estimating the Dead Space Volume between a Headform and N95 Filtering Facepiece Respirator Using Microsoft Kinect. *J. Occup. Environ. Hyg.* 2015, 12, 538–546. [CrossRef]
60. Lee, H.P.; Wang, D.Y. Objective Assessment of Increase in Breathing Resistance of N95 Respirators on Human Subjects. *Ann. Occup. Hyg.* 2011, 55, 917–921. [CrossRef]
61. Roberge, R.; Bayer, E.; Powell, J.; Coca, A.; Roberge, M.; Benson, S. Effect of Exhaled Moisture on Breathing Resistance of N95 Filtering Facepiece Respirators. *Ann. Occup. Hyg.* 2010, 54, 671–677. [CrossRef]
62. Jamjoom, A.; Nikkar-Esfahani, A.; Fitzgerald, J. Operating Theatre Related Syncope in Medical Students: A Cross Sectional Study. *BMC Med. Educ.* 2009, 9, 14. [CrossRef]
63. Asadi-Pooya, A.A.; Cross, J.H. Is Wearing a Face Mask Safe for People with Epilepsy? *Acta Neurol. Scand.* 2020, 142, 314–316. [CrossRef]

64. Lazzarino, A.I.; Steptoe, A.; Hamer, M.; Michie, S. Covid-19: Important Potential Side Effects of Wearing Face Masks That We Should Bear in Mind. *BMJ* 2020, 369, m2003. [CrossRef]
65. Guaranha, M.S.B.; Garzon, E.; Buchpiguel, C.A.; Tazima, S.; Yacubian, E.M.T.; Sakamoto, A.C. Hyperventilation Revisited: Physiological Effects and Efficacy on Focal Seizure Activation in the Era of Video-EEG Monitoring. *Epilepsia* 2005, 46, 69–75. [CrossRef]
66. Ong, J.J.Y.; Bharatendu, C.; Goh, Y.; Tang, J.Z.Y.; Sooi, K.W.X.; Tan, Y.L.; Tan, B.Y.Q.; Teoh, H.-L.; Ong, S.T.; Allen, D.M.; et al. Headaches Associated With Personal Protective Equipment—A Cross-Sectional Study among Frontline Healthcare Workers During COVID-19. *Headache* 2020, 60, 864–877. [CrossRef]
67. Jacobs, J.L.; Ohde, S.; Takahashi, O.; Tokuda, Y.; Omata, F.; Fukui, T. Use of Surgical Face Masks to Reduce the Incidence of the Common Cold among Health Care Workers in Japan: A Randomized Controlled Trial. *Am. J. Infect. Control* 2009, 37, 417–419. [CrossRef]
68. Ramirez-Moreno, J.M. Mask-Associated de Novo Headache in Healthcare Workers during the Covid-19 Pandemic. *medRxiv* 2020. [CrossRef]
69. Shenal, B.V.; Radonovich, L.J.; Cheng, J.; Hodgson, M.; Bender, B.S. Discomfort and Exertion Associated with Prolonged Wear of Respiratory Protection in a Health Care Setting. *J. Occup. Environ. Hyg.* 2011, 9, 59–64. [CrossRef]
70. Rains, S.A. The Nature of Psychological Reactance Revisited: A Meta-Analytic Review. *Hum. Commun. Res.* 2013, 39, 47–73. [CrossRef]
71. Matusiak, Ł.; Szepietowska, M.; Krajewski, P.; Białynicki-Birula, R.; Szepietowski, J.C. Inconveniences Due to the Use of Face Masks during the COVID-19 Pandemic: A Survey Study of 876 Young People. *Dermatol. Ther.* 2020, 33, e13567. [CrossRef]
72. Foo, C.C.L.; Goon, A.T.J.; Leow, Y.; Goh, C. Adverse Skin Reactions to Personal Protective Equipment against Severe Acute Respiratory Syndrome—a Descriptive Study in Singapore. *Contact Dermat.* 2006, 55, 291–294. [CrossRef]
73. Hua, W.; Zuo, Y.; Wan, R.; Xiong, L.; Tang, J.; Zou, L.; Shu, X.; Li, L. Short-Term Skin Reactions Following Use of N95 Respirators and Medical Masks. *Contact Dermat.* 2020, 83, 115–121. [CrossRef]
74. Prousa, D. Studie zu psychischen und psychovegetativen Beschwerden mit den aktuellen Mund-Nasenschutz-Verordnungen. *PsychArchives* 2020. [CrossRef]
75. Sell, T.K.; Hosangadi, D.; Trotochaud, M. Misinformation and the US Ebola Communication Crisis: Analyzing the Veracity and Content of Social Media Messages Related to a Fear-Inducing Infectious Disease Outbreak. *BMC Public Health* 2020, 20, 550. [CrossRef]
76. Ryan, R.M.; Deci, E.L. Self-determination theory and the role of basic psychological needs in personality and the organization of behavior. In *Handbook of Personality: Theory and Research*, 3rd ed.; The Guilford Press: New York, NY, USA, 2008; pp. 654–678. ISBN 978-1-59385-836-0.
77. Kent, J.M.; Papp, L.A.; Martinez, J.M.; Browne, S.T.; Coplan, J.D.; Klein, D.F.; Gorman, J.M. Specificity of Panic Response to CO(2) Inhalation in Panic Disorder: A Comparison with Major Depression and Premenstrual Dysphoric Disorder. *Am. J. Psychiatry* 2001, 158, 58–67. [CrossRef] [PubMed]
78. Morris, L.S.; McCall, J.G.; Charney, D.S.; Murrough, J.W. The Role of the Locus Coeruleus in the Generation of Pathological Anxiety. *Brain Neurosci. Adv.* 2020, 4. [CrossRef] [PubMed]
79. Gorman, J.M.; Askanazi, J.; Liebowitz, M.R.; Fyer, A.J.; Stein, J.; Kinney, J.M.; Klein, D.F. Response to Hyperventilation in a Group of Patients with Panic Disorder. *Am. J. Psychiatry* 1984, 141, 857–861. [CrossRef] [PubMed]
80. Tsugawa, A.; Sakurai, S.; Inagawa, Y.; Hirose, D.; Kaneko, Y.; Ogawa, Y.; Serisawa, S.; Takenoshita, N.; Sakurai, H.; Kanetaka, H.; et al. Awareness of the COVID-19 Outbreak and Resultant Depressive Tendencies in Patients with Severe Alzheimer's Disease. *JAD* 2020, 77, 539–541. [CrossRef]
81. Maguire, P.A.; Reay, R.E.; Looi, J.C. Nothing to Sneeze at—Uptake of Protective Measures against an Influenza Pandemic by People with Schizophrenia: Willingness and Perceived Barriers. *Australas. Psychiatry* 2019, 27, 171–178. [CrossRef]
82. COVID-19: Considerations for Wearing Masks | CDC. Available online: <https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/cloth-face-cover-guidance.html> (accessed on 12 November 2020).
83. Lim, E.C.H.; Seet, R.C.S.; Lee, K.-H.; Wilder-Smith, B.P.V.; Chuah, B.Y.S.; Ong, B.K.C. Headaches and the N95 Face-mask amongst Healthcare Providers. *Acta Neurol. Scand.* 2006, 113, 199–202. [CrossRef]
84. Badri, F.M.A. Surgical Mask Contact Dermatitis and Epidemiology of Contact Dermatitis in Healthcare Workers. *Curr. Allergy Clin. Immunol.* 2017, 30, 183–188.
85. Scarano, A.; Inchingolo, F.; Lorusso, F. Facial Skin Temperature and Discomfort When Wearing Protective Face Masks: Thermal Infrared Imaging Evaluation and Hands Moving the Mask. *Int. J. Environ. Res. Public Health* 2020, 17, 4624. [CrossRef]
86. Luksamijarulkul, P.; Aiempadit, N.; Vatanasomboon, P. Microbial Contamination on Used Surgical Masks among Hospital Personnel and Microbial Air Quality in Their Working Wards: A Hospital in Bangkok. *Oman Med. J.* 2014, 29, 346–350. [CrossRef]
87. Chughtai, A.A.; Stelzer-Braid, S.; Rawlinson, W.; Pontivivo, G.; Wang, Q.; Pan, Y.; Zhang, D.; Zhang, Y.; Li, L.; MacIntyre, C.R. Contamination by Respiratory Viruses on Outer Surface of Medical Masks Used by Hospital Healthcare Workers. *BMC Infect. Dis.* 2019, 19, 491. [CrossRef]
88. Monalisa, A.C.; Padma, K.B.; Manjunath, K.; Hemavathy, E.; Varsha, D. Microbial Contamination of the Mouth Masks Used by Post-Graduate Students in a Private Dental Institution: An In-Vitro Study. *IOSR J. Dent. Med. Sci.* 2017, 16, 61–67.
89. Liu, Z.; Chang, Y.; Chu, W.; Yan, M.; Mao, Y.; Zhu, Z.; Wu, H.; Zhao, J.; Dai, K.; Li, H.; et al. Surgical Masks as Source of Bacterial Contamination during Operative Procedures. *J. Orthop. Transl.* 2018, 14, 57–62. [CrossRef]

90. Robert Koch-Institut. *Influenza-Monatsbericht*; Robert Koch-Institut: Berlin, Germany, 2020.
91. Techasatian, L.; Lebsing, S.; Uppala, R.; Thaowandee, W.; Chaiyakit, J.; Supakunpinyo, C.; Panombualert, S.; Mairiang, D.; Saengnipanthkul, S.; Wichajarn, K.; et al. The Effects of the Face Mask on the Skin Underneath: A Prospective Survey During the COVID-19 Pandemic. *J. Prim. Care Community Health* 2020, 11, 2150132720966167. [CrossRef]
92. Lan, J.; Song, Z.; Miao, X.; Li, H.; Li, Y.; Dong, L.; Yang, J.; An, X.; Zhang, Y.; Yang, L.; et al. Skin Damage among Health Care Workers Managing Coronavirus Disease-2019. *J. Am. Acad. Dermatol.* 2020, 82, 1215–1216. [CrossRef]
93. Szepietowski, J.C.; Matusiak, Ł.; Szepietowska, M.; Krajewski, P.K.; Białynicki-Birula, R. Face Mask-Induced Itch: A Self-Questionnaire Study of 2,315 Responders during the COVID-19 Pandemic. *Acta Derm.-Venereol.* 2020, 100, adv00152. [CrossRef]
94. Darlenski, R.; Tsankov, N. COVID-19 Pandemic and the Skin: What Should Dermatologists Know? *Clin. Dermatol.* 2020. [CrossRef]
95. Muley, P.; 'Mask Mouth'-a Novel Threat to Oral Health in the COVID Era-Dr Pooja Muley. *Dental Tribune South Asia* 2020. Available online: <https://in.dental-tribune.com/news/mask-mouth-a-novel-threat-to-oral-health-in-the-covid-era/> (accessed on 12 November 2020).
96. Klimek, L.; Huppertz, T.; Alali, A.; Spielhaupter, M.; Hörmann, K.; Matthias, C.; Hagemann, J. A New Form of Irritant Rhinitis to Filtering Facepiece Particle (FFP) Masks (FFP2/N95/KN95 Respirators) during COVID-19 Pandemic. *World Allergy Organ. J.* 2020, 13, 100474. [CrossRef]
97. COVID-19 Mythbusters-World Health Organization. Available online: <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/advice-for-public/myth-busters> (accessed on 28 January 2021).
98. Asadi, S.; Cappa, C.D.; Barreda, S.; Wexler, A.S.; Bouvier, N.M.; Ristenpart, W.D. Efficacy of Masks and Face Coverings in Controlling Outward Aerosol Particle Emission from Expiratory Activities. *Sci. Rep.* 2020, 10, 15665. [CrossRef]
99. Wong, C.K.M.; Yip, B.H.K.; Mercer, S.; Griffiths, S.; Kung, K.; Wong, M.C.; Chor, J.; Wong, S.Y. Effect of Facemasks on Empathy and Relational Continuity: A Randomised Controlled Trial in Primary Care. *BMC Fam. Pract.* 2013, 14, 200. [CrossRef]
100. World Health Organization; United Nations Children's Fund. *WHO-Advice on the Use of Masks for Children in the Community in the Context of COVID-19: Annex to the Advice on the Use of Masks in the Context of COVID-19, 21 August 2020*; World Health Organization: Geneva, Switzerland, 2020.
101. Person, E.; Lemerrier, C.; Royer, A.; Reyckler, G. Effet du port d'un masque de soins lors d'un test de marche de six minutes chez des sujets sains. *Rev. Mal. Respir.* 2018, 35, 264–268. [CrossRef]
102. Johnson, A.T.; Scott, W.H.; Phelps, S.J.; Caretti, D.M.; Koh, R.C. How Is Respirator Comfort Affected by Respiratory Resistance? *J. Int. Soc. Respir. Prot.* 2005, 22, 38.
103. Koh, R.C.; Johnson, A.T.; Scott, W.H.; Phelps, S.J.; Francis, E.B.; Cattungal, S. The Correlation between Personality Type and Performance Time While Wearing a Respirator. *J. Occup. Environ. Hyg.* 2006, 3, 317–322. [CrossRef]
104. Deutsche Gesetzliche Unfallversicherung. *DGUV Grundsätze für Arbeitsmedizinische Vorsorgeuntersuchungen*; Alfons, W., Ed.; Gentner Verlag: Stuttgart, Germany, 2010; ISBN 978-3-87247-733-0.
105. Browse by Country-NATLEX. Available online: https://www.ilo.org/dyn/natlex/natlex4.byCountry?p_lang=en (accessed on 28 January 2021).
106. BAuA-SARS-CoV-2 FAQ Und Weitere Informationen-Kennzeichnung von Masken Aus USA, Kanada, Australien/Neuseeland, Japan, China Und Korea-Bundesanstalt Für Arbeitsschutz Und Arbeitsmedizin. Available online: <https://www.baua.de/DE/Themen/Arbeitsgestaltung-im-Betrieb/Coronavirus/pdf/Kennzeichnung-Masken.html> (accessed on 28 January 2021).
107. Veit, M. Hauptsache Maske! *DAZ.Online.* 2020, p. S26. Available online: <https://www.deutsche-apotheker-zeitung.de/daz-az/2020/daz-33-2020/hauptsache-maske> (accessed on 12 November 2020).
108. MacIntyre, C.R.; Seale, H.; Dung, T.C.; Hien, N.T.; Nga, P.T.; Chughtai, A.A.; Rahman, B.; Dwyer, D.E.; Wang, Q. A Cluster Randomised Trial of Cloth Masks Compared with Medical Masks in Healthcare Workers. *BMJ Open* 2015, 5, e006577. [CrossRef]
109. MacIntyre, C.R.; Chughtai, A.A. Facemasks for the Prevention of Infection in Healthcare and Community Settings. *BMJ* 2015, 350, h694. [CrossRef]
110. MacIntyre, C.R.; Wang, Q.; Seale, H.; Yang, P.; Shi, W.; Gao, Z.; Rahman, B.; Zhang, Y.; Wang, X.; Newall, A.T.; et al. A Randomized Clinical Trial of Three Options for N95 Respirators and Medical Masks in Health Workers. *Am. J. Respir. Crit. Care Med.* 2013, 187, 960–966. [CrossRef]
111. Dellweg, D.; Lepper, P.M.; Nowak, D.; Köhnlein, T.; Olgemöller, U.; Pfeifer, M. Position Paper of the German Respiratory Society (DGP) on the Impact of Community Masks on Self-Protection and Protection of Others in Regard to Aerogen Transmitted Diseases. *Pneumologie* 2020, 74, 331–336. [CrossRef]
112. Luckman, A.; Zeitoun, H.; Isoni, A.; Loomes, G.; Vlaev, I.; Powdthavee, N.; Read, D. Risk Compensation during COVID-19: The Impact of Face Mask Usage on Social Distancing. *OSF Preprints.* 2020. Available online: <https://osf.io/rb8he/> (accessed on 25 October 2020).
113. Sharma, I.; Vashnav, M.; Sharma, R. COVID-19 Pandemic Hype; Losers and Gainers. *Indian J. Psychiatry* 2020, 62, S420–S430. [CrossRef] [PubMed]
114. BfArM-Empfehlungen Des BfArM-Hinweise Des BfArM Zur Verwendung von Mund-Nasen-Bedeckungen (z.B. Selbst Hergestellten Masken, "Community-Oder DIY-Masken"), Medizinischen Gesichtsmasken Sowie Partikelfiltrierenden Halbmasken (FFP1, FFP2 Und FFP3) Im Zusammenhang Mit Dem Coronavirus (SARS-CoV-2/Covid-19). Available online: <https://www.bfarm.de/SharedDocs/Risikoinformationen/Medizinprodukte/DE/schutzmasken.html> (accessed on 12 November 2020).

115. MacIntyre, C.R.; Wang, Q.; Cauchemez, S.; Seale, H.; Dwyer, D.E.; Yang, P.; Shi, W.; Gao, Z.; Pang, X.; Zhang, Y.; et al. A Cluster Randomized Clinical Trial Comparing Fit-Tested and Non-Fit-Tested N95 Respirators to Medical Masks to Prevent Respiratory Virus Infection in Health Care Workers. *Influenza Other Respir. Viruses* **2011**, *5*, 170–179. [CrossRef] [PubMed]
116. Gralton, J.; McLaws, M.-L. Protecting Healthcare Workers from Pandemic Influenza: N95 or Surgical Masks? *Crit. Care Med.* **2010**, *38*, 657–667. [CrossRef] [PubMed]
117. Smith, J.D.; MacDougall, C.C.; Johnstone, J.; Copes, R.A.; Schwartz, B.; Garber, G.E. Effectiveness of N95 Respirators versus Surgical Masks in Protecting Health Care Workers from Acute Respiratory Infection: A Systematic Review and Meta-Analysis. *CMAJ* **2016**, *188*, 567–574. [CrossRef] [PubMed]
118. Lee, S.-A.; Grinshpun, S.A.; Reponen, T. Respiratory Performance Offered by N95 Respirators and Surgical Masks: Human Subject Evaluation with NaCl Aerosol Representing Bacterial and Viral Particle Size Range. *Ann. Occup. Hyg.* **2008**, *52*, 177–185. [CrossRef] [PubMed]
119. Zhu, N.; Zhang, D.; Wang, W.; Li, X.; Yang, B.; Song, J.; Zhao, X.; Huang, B.; Shi, W.; Lu, R.; et al. A Novel Coronavirus from Patients with Pneumonia in China, 2019. *N. Engl. J. Med.* **2020**. [CrossRef]
120. Oberg, T.; Brosseau, L.M. Surgical Mask Filter and Fit Performance. *Am. J. Infect. Control* **2008**, *36*, 276–282. [CrossRef]
121. Bringer, R.M.; Honda, T.; Adhikari, A.; Heinonen-Tanski, H.; Reponen, T.; Grinshpun, S.A. Filter Performance of N99 and N95 Facepiece Respirators Against Viruses and Ultrafine Particles. *Ann. Occup. Hyg.* **2008**, *52*, 385–396. [CrossRef]
122. Morawska, L. Droplet Fate in Indoor Environments, or Can We Prevent the Spread of Infection? *Indoor Air* **2006**, *16*, 335–347. [CrossRef]
123. Ueki, H.; Furusawa, Y.; Iwatsuki-Horimoto, K.; Imai, M.; Kabata, H.; Nishimura, H.; Kawaoka, Y. Effectiveness of Face Masks in Preventing Airborne Transmission of SARS-CoV-2. *mSphere* **2020**, *5*, e00637–20. [CrossRef]
124. Radonovich, L.J.; Simberloff, M.S.; Bessesen, M.T.; Brown, A.C.; Cummings, D.A.T.; Gaydos, C.A.; Los, J.G.; Krosche, A.E.; Gibert, C.L.; Gorse, G.J.; et al. N95 Respirators vs Medical Masks for Preventing Influenza Among Health Care Personnel: A Randomized Clinical Trial. *JAMA* **2019**, *322*, 824–833. [CrossRef]
125. Loeb, M.; Dafoe, N.; Mahony, J.; John, M.; Sarabia, A.; Glavin, V.; Webby, R.; Smieja, M.; Earn, D.J.D.; Chong, S.; et al. Surgical Mask vs N95 Respirator for Preventing Influenza Among Health Care Workers: A Randomized Trial. *JAMA* **2009**, *302*, 1865–1871. [CrossRef]
126. Konda, A.; Prakash, A.; Moss, G.A.; Schmoldt, M.; Grant, G.D.; Guha, S. Aerosol Filtration Efficiency of Common Fabrics Used in Respiratory Cloth Masks. *ACS Nano* **2020**, *14*, 6339–6347. [CrossRef]
127. Chughtai, A. Use of Cloth Masks in the Practice of Infection Control—Evidence and Policy Gaps. *Int. J. Infect. Control* **2013**, *9*. [CrossRef]
128. Labortest-Schutzmasken im Härtestest: Die Meisten Filtern Ungenügend. Available online: <https://www.srf.ch/news/panorama/labortest-schutzmasken-im-haertetest-die-meisten-filtern-ungenuegend> (accessed on 12 November 2020).
129. MacIntyre, C.R.; Cauchemez, S.; Dwyer, D.E.; Seale, H.; Cheung, P.; Browne, G.; Fasher, M.; Wood, J.; Gao, Z.; Booy, R.; et al. Face Mask Use and Control of Respiratory Virus Transmission in Households. *Emerg. Infect. Dis.* **2009**, *15*, 233–241. [CrossRef]
130. Xiao, J.; Shiu, E.Y.C.; Gao, H.; Wong, J.Y.; Fong, M.W.; Ryu, S.; Cowling, B.J. Nonpharmaceutical Measures for Pandemic Influenza in Nonhealthcare Settings—Personal Protective and Environmental Measures. *Emerg. Infect. Dis.* **2020**, *26*, 967–975. [CrossRef]
131. Aiello, A.E.; Murray, G.F.; Perez, V.; Coulborn, R.M.; Davis, B.M.; Uddin, M.; Shay, D.K.; Waterman, S.H.; Monto, A.S. Mask Use, Hand Hygiene, and Seasonal Influenza-like Illness among Young Adults: A Randomized Intervention Trial. *J. Infect. Dis.* **2010**, *201*, 491–498. [CrossRef]
132. Bundgaard, H.; Bundgaard, J.S.; Raaschou-Pedersen, D.E.T.; von Buchwald, C.; Todsén, T.; Norsk, J.B.; Pries-Heje, M.M.; Vissing, C.R.; Nielsen, P.B.; Winsløw, U.C.; et al. Effectiveness of Adding a Mask Recommendation to Other Public Health Measures to Prevent SARS-CoV-2 Infection in Danish Mask Wearers. *Ann. Intern. Med.* **2020**. [CrossRef]
133. Smart, N.R.; Horwell, C.J.; Smart, T.S.; Galea, K.S. Assessment of the Wearability of Facemasks against Air Pollution in Primary School-Aged Children in London. *Int. J. Environ. Res. Public Health* **2020**, *17*, 3935. [CrossRef]
134. Forgie, S.E.; Reitsma, J.; Spady, D.; Wright, B.; Stobart, K. The “Fear Factor” for Surgical Masks and Face Shields, as Perceived by Children and Their Parents. *Pediatrics* **2009**, *124*, e777–e781. [CrossRef]
135. Schwarz, S.; Jenetzky, E.; Krafft, H.; Maurer, T.; Martin, D. Corona Children Studies “Co-Ki”: First Results of a Germany-Wide Registry on Mouth and Nose Covering (Mask) in Children. *Monatsschrift Kinderheilkunde* **2021**, 1–10. [CrossRef]
136. Zoccal, D.B.; Furuya, W.I.; Bassi, M.; Colombari, D.S.A.; Colombari, E. The Nucleus of the Solitary Tract and the Coordination of Respiratory and Sympathetic Activities. *Front. Physiol.* **2014**, *5*, 238. [CrossRef]
137. Neilson, S. The Surgical Mask Is a Bad Fit for Risk Reduction. *CMAJ* **2016**, *188*, 606–607. [CrossRef]
138. SOCIUM Research Center on Inequality and Social Policy, Universität Bremen. Available online: <https://www.socium.uni-bremen.de/ueber-das-socium/aktuelles/archiv/> (accessed on 28 January 2021).
139. Fadare, O.O.; Okoffo, E.D. Covid-19 Face Masks: A Potential Source of Microplastic Fibers in the Environment. *Sci. Total Environ.* **2020**, *737*, 140279. [CrossRef]
140. Potluri, P.; Needham, P. *Technical Textiles for Protection (Manchester EScholar-The University of Manchester)*; Woodhead Publishing: Cambridge, UK, 2005.
141. Schnurr, R.E.J.; Alboiu, V.; Chaudhary, M.; Corbett, R.A.; Quanz, M.B.; Sankar, K.; Srain, H.S.; Thavarajah, V.; Xanthos, D.; Walker, T.R. Reducing Marine Pollution from Single-Use Plastics (SUPs): A Review. *Mar. Pollut. Bull.* **2018**, *137*, 157–171. [CrossRef]

142. Reid, A.J.; Carlson, A.K.; Creed, I.F.; Eliason, E.J.; Gell, P.A.; Johnson, P.T.J.; Kidd, K.A.; MacCormack, T.J.; Olden, J.D.; Ormerod, S.J.; et al. Emerging Threats and Persistent Conservation Challenges for Freshwater Biodiversity. *Biol. Rev. Camb. Philos. Soc.* **2019**, *94*, 849–873. [CrossRef]
143. Fisher, K.A.; Tenforde, M.W.; Feldstein, L.R.; Lindsell, C.J.; Shapiro, N.I.; Files, D.C.; Gibbs, K.W.; Erickson, H.L.; Prekker, M.B.; Steingrub, J.S.; et al. Community and Close Contact Exposures Associated with COVID-19 among Symptomatic Adults ≥ 18 Years in 11 Outpatient Health Care Facilities—United States, July 2020. *MMWR Morb. Mortal. Wkly. Rep.* **2020**, *69*, 1258–1264. [CrossRef]
144. Belkin, N. The Evolution of the Surgical Mask: Filtering Efficiency versus Effectiveness. *Infect. Control Hosp. Epidemiol.* **1997**, *18*, 49–57. [CrossRef]
145. Cowling, B.J.; Chan, K.-H.; Fang, V.J.; Cheng, C.K.Y.; Fung, R.O.P.; Wai, W.; Sin, J.; Seto, W.H.; Yung, R.; Chu, D.W.S.; et al. Facemasks and Hand Hygiene to Prevent Influenza Transmission in Households: A Cluster Randomized Trial. *Ann. Intern. Med.* **2009**, *151*, 437–446. [CrossRef]
146. Cowling, B.J.; Zhou, Y.; Ip, D.K.M.; Leung, G.M.; Aiello, A.E. Face Masks to Prevent Transmission of Influenza Virus: A Systematic Review. *Epidemiol. Infect.* **2010**, *138*, 449–456. [CrossRef]
147. Institute of Medicine (US). Committee on Personal Protective Equipment for Healthcare Personnel to Prevent Transmission of Pandemic Influenza and Other Viral Respiratory Infections: Current Research Issues. In *Preventing Transmission of Pandemic Influenza and Other Viral Respiratory Diseases: Personal Protective Equipment for Healthcare Personnel: Update 2010*; Larson, E.L., Liverman, C.T., Eds.; National Academies Press (US): Washington, DC, USA, 2011; ISBN 978-0-309-16254-8.
148. Matuschek, C.; Moll, F.; Fangerau, H.; Fischer, J.C.; Zänker, K.; van Griensven, M.; Schneider, M.; Kindgen-Milles, D.; Knoefel, W.T.; Lichtenberg, A.; et al. The History and Value of Face Masks. *Eur. J. Med. Res.* **2020**, *25*, 23. [CrossRef] [PubMed]
149. Spooner, J.L. History of Surgical Face Masks. *AORN J.* **1967**, *5*, 76–80. [CrossRef]
150. Burgess, A.; Horii, M. Risk, Ritual and Health Responsibilisation: Japan's "safety Blanket" of Surgical Face Mask-Wearing. *Sociol. Health Illn.* **2012**, *34*, 1184–1198. [CrossRef] [PubMed]
151. Beck, U. *Risk Society, towards a New Modernity*; SAGE Publications Ltd: Thousand Oaks, CA, USA, 1992.
152. Cheng, K.K.; Lam, T.H.; Leung, C.C. Wearing Face Masks in the Community during the COVID-19 Pandemic: Altruism and Solidarity. *Lancet* **2020**. [CrossRef]
153. Melnychuk, M.C.; Dockree, P.M.; O'Connell, R.G.; Murphy, P.R.; Balsters, J.H.; Robertson, I.H. Coupling of Respiration and Attention via the Locus Coeruleus: Effects of Meditation and Pranayama. *Psychophysiology* **2018**, *55*, e13091. [CrossRef] [PubMed]
154. Andresen, M.C.; Kunze, D.L. Nucleus Tractus Solitarius—Gateway to Neural Circulatory Control. *Annu. Rev. Physiol.* **1994**, *56*, 93–116. [CrossRef] [PubMed]
155. Kline, D.D.; Ramírez-Navarro, A.; Kunze, D.L. Adaptive Depression in Synaptic Transmission in the Nucleus of the Solitary Tract after In Vivo Chronic Intermitent Hypoxia: Evidence for Homeostatic Plasticity. *J. Neurosci.* **2007**, *27*, 4663–4673. [CrossRef]
156. King, T.L.; Heesch, C.M.; Clark, C.G.; Kline, D.D.; Hasser, E.M. Hypoxia Activates Nucleus Tractus Solitarius Neurons Projecting to the Paraventricular Nucleus of the Hypothalamus. *Am. J. Physiol. Regul. Integr. Comp. Physiol.* **2012**, *302*, R1219–R1232. [CrossRef]
157. Yackle, K.; Schwarz, L.A.; Kam, K.; Sorokin, J.M.; Huguenard, J.R.; Feldman, J.L.; Luo, L.; Krasnow, M.A. Breathing Control Center Neurons That Promote Arousal in Mice. *Science* **2017**, *355*, 1411–1415. [CrossRef]
158. Menuet, C.; Connelly, A.A.; Bassi, J.K.; Melo, M.R.; Le, S.; Kamar, J.; Kumar, N.N.; McDougall, S.J.; McMullan, S.; Allen, A.M. PreBötzing Complex Neurons Drive Respiratory Modulation of Blood Pressure and Heart Rate. *eLife* **2020**, *9*, e57288. [CrossRef]
159. Zope, S.A.; Zope, R.A. Sudarshan Kriya Yoga: Breathing for Health. *Int. J. Yoga* **2013**, *6*, 4–10. [CrossRef]
160. Cummins, E.P.; Strowitzki, M.J.; Taylor, C.T. Mechanisms and Consequences of Oxygen and Carbon Dioxide Sensing in Mammals. *Physiol. Rev.* **2020**, *100*, 463–488. [CrossRef]
161. Jafari, M.J.; Khajevandi, A.A.; Mousavi Najarkola, S.A.; Yekaninejad, M.S.; Pourhoseingholi, M.A.; Qmidi, L.; Kalantary, S. Association of Sick Building Syndrome with Indoor Air Parameters. *Tanaffos* **2015**, *14*, 55–62.
162. Redlich, C.A.; Sparer, J.; Cullen, M.R. Sick-Building Syndrome. *Lancet* **1997**, *349*, 1013–1016. [CrossRef]
163. Kaw, R.; Hernandez, A.V.; Walker, E.; Aboussouan, L.; Mokhlesi, B. Determinants of Hypercapnia in Obese Patients with Obstructive Sleep Apnea: A Systematic Review and Metaanalysis of Cohort Studies. *Chest* **2009**, *136*, 787–796. [CrossRef]
164. Edwards, N.; Wilcox, I.; Polo, O.J.; Sullivan, C.E. Hypercapnic Blood Pressure Response Is Greater during the Luteal Phase of the Menstrual Cycle. *J. Appl. Physiol.* **1996**, *81*, 2142–2146. [CrossRef]
165. AAFA Community Services. What People with Asthma Need to Know about Face Masks and Coverings during the COVID-19 Pandemic. Available online: <https://community.aafa.org/blog/what-people-with-asthma-need-to-know-about-face-masks-and-coverings-during-the-covid-19-pandemic> (accessed on 29 January 2021).
166. Shigemura, M.; Lecuona, E.; Angulo, M.; Homma, T.; Rodríguez, D.A.; Gonzalez-Gonzalez, F.J.; Welch, L.C.; Amarelle, L.; Kim, S.-J.; Kaminski, N.; et al. Hypercapnia Increases Airway Smooth Muscle Contractility via Caspase-7-Mediated MiR-133a-RhoA Signaling. *Sci. Transl. Med.* **2018**, *10*, eaat1662. [CrossRef]
167. Roberge, R. Facemask Use by Children during Infectious Disease Outbreaks. *Biosecur. Bioterror.* **2011**, *9*, 225–231. [CrossRef]
168. Schwarz, S.; Jenetzky, E.; Krafft, H.; Maurer, T.; Steuber, C.; Reckert, T.; Fischbach, T.; Martin, D. Corona bei Kindern: Die Co-Ki Studie. *Mon. Kinderheilkde* **2020**. [CrossRef]
169. van der Kleij, L.A.; De Vis, J.B.; de Bresser, J.; Hendrikse, J.; Siero, J.C.W. Arterial CO₂ Pressure Changes during Hypercapnia Are Associated with Changes in Brain Parenchymal Volume. *Eur. Radiol. Exp.* **2020**, *4*, 17. [CrossRef]

170. Geer Wallace, M.A.; Pleil, J.D. Evolution of Clinical and Environmental Health Applications of Exhaled Breath Research: Review of Methods: Instrumentation for Gas-Phase, Condensate, and Aerosols. *Anal. Chim. Acta* **2018**, *1024*, 18–38. [CrossRef] [PubMed]
171. Sukul, P.; Schubert, J.K.; Zanaty, K.; Trefz, P.; Sinha, A.; Kamysek, S.; Miekisch, W. Exhaled Breath Compositions under Varying Respiratory Rhythms Reflects Ventilatory Variations: Translating Breathomics towards Respiratory Medicine. *Sci. Rep.* **2020**, *10*, 14109. [CrossRef] [PubMed]
172. Lai, P.S.; Christiani, D.C. Long-Term Respiratory Health Effects in Textile Workers. *Curr. Opin. Pulm. Med.* **2013**, *19*, 152–157. [CrossRef] [PubMed]
173. Goetz, L.H.; Schork, N.J. Personalized Medicine: Motivation, Challenges and Progress. *Fertil. Steril.* **2018**, *109*, 952–963. [CrossRef]
174. Samannan, R.; Holt, G.; Calderon-Candelario, R.; Mirsaeidi, M.; Campos, M. Effect of Face Masks on Gas Exchange in Healthy Persons and Patients with COPD. *Ann. ATS* **2020**. [CrossRef]
175. Streeck, H.; Schulte, B.; Kuemmerer, B.; Richter, E.; Hoeller, T.; Fuhrmann, C.; Bartok, E.; Dolscheid, R.; Berger, M.; Wessendorf, L.; et al. Infection Fatality Rate of SARS-CoV-2 Infection in a German Community with a Super-Spreading Event. *medRxiv* **2020**. [CrossRef]
176. Ioannidis, J. The Infection Fatality Rate of COVID-19 Inferred from Seroprevalence Data. *medRxiv* **2020**. [CrossRef]
177. Executive Board: Special Session on the COVID-19 Response. Available online: <https://www.who.int/news-room/events/detail/2020/10/05/default-calendar/executive-board-special-session-on-the-covid19-response> (accessed on 13 November 2020).
178. International Health Conference. WHO-Constitution of the World Health Organization. 1946. *Bull. World Health Organ.* **2002**, *80*, 983–984.

Pfizer's mRNA Vaccine Trial Documentation. This is the Title Page.

PF-07302048/BNT162 RNA-Based COVID-19 Vaccines
Protocol C4591001



A PHASE 1-2/3, PLACEBO-CONTROLLED, RANDOMIZED, OBSERVATIONAL,
DOSE-FINDING STUDY TO EVALUATE THE SAFETY, TOLERABILITY,
IMMUNOGENICITY, AND EFFICACY OF SARS-CoV-2 RNA VACCINE
CANDIDATES AGAINST COVID-19 IN HEALTHY INDIVIDUALS

Study Sponsor:	BioNTech
Study Conducted By:	Pfizer
Study Intervention Number:	PF-07302048
Study Intervention Name:	RNA-Based COVID-19 Vaccines
US IND Number:	19736
EudraCT Number:	2020-002641-42
Protocol Number:	C4591001
Phase:	1-2/3

Short Title: A Phase 1-2/3 Study to Evaluate the Safety, Tolerability, Immunogenicity, and Efficacy of RNA Vaccine Candidates Against COVID-19 in Healthy Individuals

p. 67-69 pertinent info for pregnant women

p. 70 cardiovascular

Pfizer's mRNA Vaccine Trial Documentation References Knowledge of "Shedding"

8.3.5. Exposure During Pregnancy or Breastfeeding, and Occupational Exposure

Exposure to the study intervention under study during pregnancy or breastfeeding and occupational exposure are reportable to Pfizer Safety within 24 hours of investigator awareness.

8.3.5.1. Exposure During Pregnancy

An EDP occurs if:

- A female participant is found to be pregnant while receiving or after discontinuing study intervention.
- A male participant who is receiving or has discontinued study intervention exposes a female partner prior to or around the time of conception.
- A female is found to be pregnant while being exposed or having been exposed to study intervention due to environmental exposure. Below are examples of environmental exposure during pregnancy:
- A female family member or healthcare provider reports that she is pregnant after having been exposed to the study intervention by inhalation or skin contact.

Page 177

PF-07302048 (BNT162 RNA-Based COVID-19 Vaccine)
Protocol C4591061

- A male family member or healthcare provider who has been exposed to the study intervention by inhalation or skin contact then reports his female partner prior to or around the time of conception.

There are currently no FDA approved COVID-19 vaccines on the market.

- ① Safety and efficacy testing is ongoing. (Source: FDA <https://bit.ly/3r20WFh>)
For information about vaccines, visit <https://vaccine.guide>.

What is a "Study Intervention?"

6. STUDY INTERVENTION

Study intervention is defined as any investigational intervention(s), marketed product(s), placebo, medical device(s), or study procedure(s) intended to be administered to a study participant according to the study protocol.

The study will evaluate a 2-dose (separated by 21 days) schedule of various different dose levels of 2 investigational RNA vaccine candidates for active immunization against COVID-19 in 3 age groups (18 to 55 years of age, 65 to 85 years of age, and ≥ 12 years of age [stratified as 12-15, 16-55, or >55 years of age]).

These 2 investigational RNA vaccine candidates, with the addition of saline placebo, are the 3 potential study interventions that may be administered to a study participant:

- BNT162b1 (BNT162 RNA-LNP vaccine utilizing modRNA and encoding the RBD):
10 µg, 20 µg, 30 µg, 100 µg Clinical Batch
- BNT162b2 (BNT162 RNA-LNP vaccine utilizing modRNA and encoding the P2 S):
10 µg, 20 µg, 30 µg Commercial Batch
- Normal saline (0.9% sodium chloride solution for injection)
Placebo

The vaccine candidate selected for Phase 2/3 evaluation is BNT162b2 at a dose of 30 µg.

So, the "study interventions" in this controlled experiment are the two different mRNA vaccine batches or the saline placebo.

PF-07302048 (BNT162 RNA-Based COVID-19 Vaccines)
Protocol C4591001

8.3.6. Cardiovascular and Death Events

Not applicable. ???

8.3.7. Disease-Related Events and/or Disease-Related Outcomes Not Qualifying as AEs or SAEs

Potential COVID-19 illnesses and their sequelae that are consistent with the clinical endpoint definition should not be recorded as AEs. These data will be captured as efficacy assessment data only on the relevant pages of the CRF, as these are expected endpoints.

Potential COVID-19 illnesses and their sequelae will not be reported according to the standard process for expedited reporting of SAEs, even though the event may meet the definition of an SAE. These events will be recorded on the COVID-19 illness pages in the participant's CRF within 1 day.

NOTE: However, if either of the following conditions applies, then the event must be recorded and reported as an SAE (instead of a disease-related event):

The event is, in the investigator's opinion, of greater intensity, frequency, or duration than expected for the individual participant.

OR

The investigator considers that there is a reasonable possibility that the event was related to study intervention.

Potential COVID-19 illness events and their sequelae will be reviewed by a group of internal blinded case reviewers. Any SAE that is determined by the internal case reviewers NOT to meet endpoint criteria is reported back to the investigator site of incidence. The investigator must report the SAE to Pfizer Safety within 24 hours of being made aware that the SAE did not meet endpoint criteria. The investigator's SAE awareness date is the date on which the investigator site of incidence receives the SAE back from the internal case reviewers.

8.3.8. Adverse Events of Special Interest

Not applicable.

8.3.8.1. Lack of Efficacy

Lack of efficacy is reportable to Pfizer Safety only if associated with an SAE.

8.3.9. Medical Device Deficiencies

Not applicable.

8.3.10. Medication Errors

Medication errors may result from the administration or consumption of the study intervention by the wrong participant, or at the wrong time, or at the wrong dosage strength.



Pregnant Women Should Not Get a COVID Vaccine

Analysis by Dr. Joseph Mercola

✓ Fact Checked

STORY AT-A-GLANCE

- Women of childbearing age have virtually no risk of dying from COVID-19, their fatality risk being a mere 0.01%, so they are unlikely to reap any significant benefit from a COVID-19 vaccine, which does not prevent you from contracting and spreading SARS-CoV-2
- As of April 1, 2021, VAERS had received 56,869 reports of adverse events following COVID-19 vaccination, including 110 reports of miscarriage or premature birth among pregnant women. In all, 379 pregnant women reported some sort of adverse event
- Side effects hinting at reproductive side effects are being reported, such as heavier than normal menstrual flow, uterine bleeding or restarting their period for the first time in years
- Doctors at Cleveland University Hospital system are seeing swollen lymph nodes — one sign of breast cancer — in the mammograms of women who have had a COVID vaccine, and typically on the side where the vaccine was given
- A vaccination safety monitoring program led by the CDC called V-Safe currently has 2,000 pregnant patients enrolled, but fewer than 300 had completed their pregnancies by the end of March 2021, so safety data is still extremely limited

By injecting pregnant women with novel COVID-19 mRNA gene technologies, the medical establishment has thrown away one of the most fundamental safety edicts of medicine, which is that you do not experiment on pregnant women.

None of the COVID-19 vaccines on the market are licensed. They've only received emergency use authorization, as basic efficacy and safety studies are still ongoing. Yet pregnant women are urged to get vaccinated, and are lining up to get the shot — probably while at the same time being careful about avoiding second-hand smoke, alcohol and drugs with known or suspected toxicity.

In my view, giving these vaccines to pregnant women is beyond reprehensible. This experimentation is doubly unforgivable seeing how women of childbearing age have virtually no risk of dying from COVID-19, their fatality risk being a mere 0.01%.¹

Contrast this dramatic downside to the potential benefits of the vaccine. You can still contract the virus if immunized and you can still spread it to others.² All it is designed to do is lessen your symptoms if or when you get infected. Pregnant women simply do not need this vaccine, and therefore any risk is likely excessive.

It seems like the choice is obvious, unless you are an unethical pharmaceutical company that has been previously convicted of criminal felonies that resulted in billions of dollars in judgments and is seeking to create tens of billions of dollars of revenue.

Abnormal Periods and Miscarriage Reported

As reported by The Defender,³ as of April 1, 2021, VAERS had received 56,869 adverse events following COVID-19 vaccination, including 7,971 serious injuries and 2,342 deaths. Of those deaths, 28% occurred within 48 hours of vaccination. The youngest person to die was just 18 years old.

There were also 110 reports of miscarriage or premature birth among pregnant women. In all, 379 pregnant women reported some sort of adverse event. In the U.K., the Medicines and Healthcare Products Regulatory Agency (MHRA) Yellow Card reporting site that collects COVID-19 vaccine side effects had, as of March 28, 2021, 40 miscarriages listed for Pfizer's vaccine⁴ and 15 for AstraZeneca's.⁵

Stephanie Seneff, Ph.D., sent me a 2006 study⁶ that could explain this, as it showed sperm can take up foreign mRNA, convert it into DNA, and release it as little pellets

(plasmids) in the medium around the fertilized egg. The embryo then takes up these plasmids and carries them (sustains and clones them into many of the daughter cells) throughout its life, even passing them on to future generations.

It is possible that the pseudo-exosomes that are the mRNA contents would be perfect for supplying the sperm with mRNA for the spike protein. So, potentially, a vaccinated woman who gets pregnant with an embryo that can (via the sperms' plasmids) synthesize the spike protein according to the instructions in the vaccine, would have an immune capacity to attack that embryo because of the "foreign" protein it displays on its cells. This then would cause a miscarriage.

If there were, truly, a public health authority in the U.S., the criminals that are recommending this would be put in prison for reprehensible criminal negligence for the unnecessary damages they are causing to pregnant women and the deaths of their unborn children.

Even among non-pregnant women, side effects hinting at reproductive side effects are being reported, such as heavier than normal menstrual flow, uterine bleeding or restarting their period for the first time in years.^{7,8}

While no one knows what might be causing the heavier flow, it may be worth looking into the parallels between the blood clotting disorders reported, both in some COVID-19 cases and post-COVID-19 vaccination, and Von Willebrand disease, a chronic condition that prevents normal blood clotting, thus resulting in excessively heavy periods.

Rare and Lethal Blood Disorder Reported

Several individuals have rapidly developed immune thrombocytopenia^{9,10} (ITP), a rare autoimmune disease, following COVID-19 vaccination.¹¹ The condition, which is often lethal, causes your immune system to destroy your platelets (cells that help blood clot), resulting in hemorrhaging. Despite the loss of platelets, serious blood clots are also occurring at the same time.

One example is the 58-year-old Florida doctor who got the Pfizer vaccine and died from sudden onset of ITP two weeks later. Dr. Jerry L. Spivak, an expert on blood disorders at Johns Hopkins University, told The New York Times "it is a medical certainty" that Pfizer's COVID-19 vaccine caused the man's death.^{12,13} Pfizer, of course, denies any connection.

At least two papers have been published on the condition, as scientists search for clues as to how the vaccines might be causing this unusual reaction. As reported by The Defender:¹⁴

"Two teams of researchers have published detailed observations of patients who developed thrombotic thrombocytopenia after receiving the AstraZeneca vaccine and have speculated about a possible mechanism.

Both groups suggest that the development of serious blood clots alongside falling levels of platelets is an immune response that resembles a rare reaction to the drug heparin, called heparin-induced thrombocytopenia. The researchers have labelled the syndrome vaccine-induced immune thrombotic thrombocytopenia."^{15,16}

It's unclear, however, where the platelet-antagonistic antibodies come from. They might form against the spike antigen, or perhaps it's a response triggered by some other immune response factor. Either way, doctors at Oslo University Hospital recently announced the blood clotting disorders experienced by some recipients of the AstraZeneca vaccine are caused by the vaccine:¹⁷

"Our theory that this is a powerful immune response most likely triggered by the vaccine, has been confirmed ... In collaboration with experts in the field from the University Hospital of North Norway HF, we have found specific antibodies against blood platelets that can cause these reactions ...

We have the reason. Nothing but the vaccine can explain why these individuals had this immune response. There is nothing in the patient history of these individuals that can give such a powerful immune response. I am confident that

the antibodies that we have found are the cause, and I see no other explanation than it being the vaccine which triggers it."

Several European countries have halted use of the AstraZeneca vaccine due to blood clots in the past several weeks, and in the U.S., the FDA and CDC have agreed to temporarily halt use of Johnson & Johnson's vaccine while they review six reports of blood clots in combination with low platelet counts. So far, one has died. Another is in serious condition. The announcement was made April 13, 2021.¹⁸

Another Novel Hypothesis

Other potential mechanisms of action also exist. For example, as noted by freelance medical writer and neurobiology postgrad Shin Jie Yong in a March 19, 2021, Medium article,¹⁹ Dr. Goh Kiang Hua, a consultant general surgeon and Fellow of the Royal College of Surgeons, has suggested a novel hypothesis to explain the loss of platelets seen in some COVID-19 vaccine recipients.

He believes the lipid-coated nanoparticles, which transport the mRNA, may be carrying that mRNA into the megakaryocytes in your bone marrow. Megakaryocytes are cells that produce platelets. According to this hypothesis, once the mRNA enters your bone marrow, the megakaryocytes would then begin to express the SARS-CoV-2 spike protein, which would tag them for destruction by cytotoxic T-cells.

"Platelets then become deficient, causing thrombocytopenia," Yong writes, adding, "Of course, he emphasized that these are just speculations." In my view, Hua may well be onto something. If correct, it would be an elegant explanation.

Breast Cancer Symptoms

Many also report developing swollen lymph nodes after their COVID-19 vaccination and, as reported by Fox 8 News Cleveland,²⁰ doctors at Cleveland University Hospital system are seeing swollen lymph nodes in the mammograms of women who have had a COVID vaccine, and typically on the side where the vaccine was given.

Swollen lymph nodes on a mammogram are one sign of **breast cancer**. University Hospital's breast imaging department also reported that they are fielding calls from patients who are concerned about finding swollen nodes under their arms.

According to the news report, data from the U.S. Centers for Disease Control and Prevention shows over 11% of vaccine recipients have swollen lymph nodes after the first dose of COVID-19 vaccine and 16% after the second dose. The swelling typically begins two to four days post-vaccination, and can persist for up to four weeks.

Lymph nodes that remain engorged beyond the four-week mark need to be evaluated by your doctor, Dr. Holly Marshall with University Hospitals told Fox 8 News.

Scarcity of Controlled Trials in Pregnant Women

Getting back to vaccination during pregnancy, it's important to realize that this is a time during which experimentation can be the most hazardous of all, as you're not only dealing with potential repercussions for the mother but also for the child. Any number of things can go wrong when you introduce drugs, chemicals or foreign substances during fetal development.

According to the Mayo Clinic,²¹ 30,000 pregnant women have been "successfully" vaccinated against COVID-19 in the U.S. with either Pfizer's or Moderna's mRNA vaccines. They don't mention anything about reported side effects, but as mentioned earlier, 379 VAERS reports had been filed by pregnant women as of April 1, 2021.

A recent BBC article²² sought to make light of post-vaccination miscarriages, saying, "Data showing a miscarriage occurred after a vaccine does not mean that the two events are linked." Meanwhile, people dying from heart attacks, cancer and other longstanding diseases who tested positive for SARS-CoV-2 were counted as COVID-19 deaths, no questions asked. There was no difficulty in linking those data points to drive up COVID-19 fatality statistics.

The BBC also notes that miscarriage is "very common," with 1 in 8 pregnancies (12.5%) ending in miscarriage. The U.K. MHRA, in an effort to put a lid on concerns about

miscarriages, claim they occur in "about 1 in 4 pregnancies,"²³ or 25%, which strikes me as an exaggeration.

Other sources²⁴ reviewing statistical data stress that the risk of miscarriage drops from an overall, average risk rate of 21.3% for the duration of the pregnancy as a whole, to 5% between Weeks 6 and 7, all the way down to 1% between Weeks 14 and 20. One way to assess whether miscarriages are in fact increasing after vaccination could be to compare miscarriage rates during the second and third trimester, when spontaneous losses are at their lowest under normal circumstances.

“Injecting pregnant women with novel gene therapy technology that can trigger systemic inflammation, cardiac effects and bleeding disorders isn’t a good idea, and violates both the Hippocratic Oath that admonishes doctors to “First, do no harm,” and the precautionary principle that, historically, has governed health care for pregnant women.”

A vaccination safety monitoring program led by the CDC called V-Safe currently has 2,000 pregnant patients enrolled, but fewer than 300 had completed their pregnancies by the end of March 2021.²⁵ Their babies will be evaluated for side effects until they’re 3 months old.²⁶

These are not significant numbers. It’s also a very short follow-up for the babies. So, while COVID-19 vaccines are hailed as safe for pregnant women and their babies alike, they seem to be basing such claims on extremely limited data.

On the whole, injecting pregnant women with novel gene therapy technology that can trigger systemic inflammation, cardiac effects and bleeding disorders (among other things), isn’t a good idea in my view, and violates both the Hippocratic Oath that admonishes doctors to “First, do no harm,” and the precautionary principle that, historically, has governed health care for pregnant women.

Report All COVID-19 Vaccine Side Effects

If you or someone you love has received a COVID-19 vaccine and are experiencing side effects, be sure to report it, preferably to all three of these locations:²⁷

1. If you live in the U.S., file a report on VAERS
2. Report the injury on VaxxTracker.com, which is a nongovernmental adverse event tracker (you can file anonymously if you like)
3. Report the injury on the Children's Health Defense website

Sources and Reference

- ¹ Annals of Internal Medicine September 2, 2020 DOI: 10.7326/M20-5352
- ² The Defender April 6, 2021
- ³ The Defender April 9, 2021
- ⁴ UK Gov Yellow Card Report for Pfizer, March 28, 2021 (PDF)
- ⁵ UK Gov Yellow Card Report for AstraZeneca, March 28, 2021 (PDF)
- ⁶ Molecular Reproduction and Development 73(10):1239-46
- ⁷ MSN April 10, 2021
- ⁸ UK Gov Yellow Card Report Unspecified Brand March 28, 2021 (PDF)
- ⁹ Hopkins Medicine ITP
- ^{10, 14} The Defender April 13, 2021
- ¹¹ The Defender February 9, 2021
- ¹² New York Times January 12, 2021
- ¹³ The Defender January 13, 2021
- ¹⁵ NEJM April 9, 2021 DOI: 10.1056/NEJMoa2104882
- ¹⁶ NEJM April 9, 2021 DOI: 10.1056/NEJMoa2104840
- ¹⁷ Science Norway March 18, 2021
- ¹⁸ NBC News April 13, 2021
- ¹⁹ Medium March 19, 2021
- ²⁰ Fox 8 Cleveland February 2021
- ^{21, 25, 26} Mayo Clinic March 29, 2021
- ²² BBC April 11, 2021
- ²³ Reuters March 31, 2021
- ²⁴ Medical News Today January 12, 2020
- ²⁷ The Defender January 25, 2021

COVID-19 RNA Based Vaccines and the Risk of Prion Disease

J. Bart Classen, MD*

Classen Immunotherapies, Inc., 3637 Rockdale Road, Manchester, MD 21102, E-mail: classen@vaccines.net.

*Correspondence:

J. Bart Classen, MD, Classen Immunotherapies, Inc., 3637 Rockdale Road, Manchester, MD 21102, Tel: 410-377-8526.

Received: 27 December 2020; Accepted: 18 January 2021

Citation: Classen JB. COVID-19 RNA Based Vaccines and the Risk of Prion Disease. Microbiol Infect Dis. 2021; 5(1): 1-3.

ABSTRACT

Development of new vaccine technology has been plagued with problems in the past. The current RNA based SARS-CoV-2 vaccines were approved in the US using an emergency order without extensive long term safety testing. In this paper the Pfizer COVID-19 vaccine was evaluated for the potential to induce prion-based disease in vaccine recipients. The RNA sequence of the vaccine as well as the spike protein target interaction were analyzed for the potential to convert intracellular RNA binding proteins TAR DNA binding protein (TDP-43) and Fused in Sarcoma (FUS) into their pathologic prion conformations. The results indicate that the vaccine RNA has specific sequences that may induce TDP-43 and FUS to fold into their pathologic prion conformations. In the current analysis a total of sixteen UG tandem repeats (ΨGΨG) were identified and additional UG (ΨG) rich sequences were identified. Two GGΨA sequences were found. Potential G Quadruplex sequences are possibly present but a more sophisticated computer program is needed to verify these. Furthermore, the spike protein, created by the translation of the vaccine RNA, binds angiotensin converting enzyme 2 (ACE2), a zinc containing enzyme. This interaction has the potential to increase intracellular zinc. Zinc ions have been shown to cause the transformation of TDP-43 to its pathologic prion configuration. The folding of TDP-43 and FUS into their pathologic prion conformations is known to cause ALS, front temporal lobar degeneration, Alzheimer's disease and other neurological degenerative diseases. The enclosed finding as well as additional potential risks leads the author to believe that regulatory approval of the RNA based vaccines for SARS-CoV-2 was premature and that the vaccine may cause much more harm than benefit.

Keywords

COVID-19, Vaccines, Diabetes, Immunity.

Introduction

Vaccines have been found to cause a host of chronic, late developing adverse events. Some adverse events like type 1 diabetes may not occur until 3-4 years after a vaccine is administered [1]. In the example of type 1 diabetes the frequency of cases of adverse events may surpass the frequency of cases of severe infectious disease the vaccine was designed to prevent. Given that type 1 diabetes is only one of many immune mediated diseases potentially caused by vaccines, chronic late occurring adverse events are a serious public health issue.

The advent of new vaccine technology creates new potential mechanisms of vaccine adverse events. For example, the first killed polio vaccine actually caused polio in recipients because the up scaled manufacturing process did not effectively kill

the polio virus before it was injected into patients. RNA based vaccines offers special risks of inducing specific adverse events. One such potential adverse event is prion based diseases caused by activation of intrinsic proteins to form prions. A wealth of knowledge has been published on a class of RNA binding proteins shown to participating in causing a number of neurological diseases including Alzheimer's disease and ALS. TDP-43 and FUS are among the best studied of these proteins [2].

The Pfizer RNA based COVID-19 vaccine was approved by the US FDA under an emergency use authorization without long term safety data. Because of concerns about the safety of this vaccine a study was performed to determine if the vaccine could potentially induce prion based disease.

Methods

Pfizer's RNA based vaccine against COVID-19 was evaluated for the potential to convert TDP-43 and or FUS to their prion based

disease causing states. The vaccine RNA was analyzed for the presence of sequences that can activate TDP-43 and FUS. The interaction of the transcribed spike protein with its target was analyzed to determine if this action could also activate TDP-43 and FUS.

Results

Analysis of the Pfizer vaccine against COVID-19 identified two potential risk factors for inducing prion disease in humans. The RNA sequence in the vaccine [3] contains sequences believed to induce TDP-43 and FUS to aggregate in their prion based conformation leading to the development of common neurodegenerative diseases. In particular it has been shown that RNA sequences GGUA [4], UG rich sequences [5], UG tandem repeats [6], and G Quadruplex sequences [7], have increased affinity to bind TDP-43 and or FUS and may cause TDP-43 or FUS to take their pathologic configurations in the cytoplasm. In the current analysis a total of sixteen UG tandem repeats (ΨGΨG) were identified and additional UG (ΨG) rich sequences were identified. Two GGΨA sequences were found. G Quadruplex sequences are possibly present but sophisticated computer programs are needed to verify these.

The spike protein encoded by the vaccine binds angiotensin converting enzyme 2 (ACE2), an enzyme which contains zinc molecules [8]. The binding of spike protein to ACE2 has the potential to release the zinc molecule, an ion that causes TDP-43 to assume its pathologic prion transformation [9].

Discussion

There is an old saying in medicine that "the cure may be worse than the disease." The phrase can be applied to vaccines. In the current paper the concern is raised that the RNA based COVID vaccines have the potential to cause more disease than the epidemic of COVID-19. This paper focuses on a novel potential adverse event mechanism causing prion disease which could be even more common and debilitating than the viral infection the vaccine is designed to prevent. While this paper focuses on one potential adverse event there are multiple other potential fatal adverse events as discussed below.

Over the last two decades there has been a concern among certain scientists that prions could be used as bioweapons. More recently there has been a concern that ubiquitous intracellular molecules could be activated to cause prion disease including Alzheimer's disease, ALS and other neurodegenerative diseases. This concern originates due to potential for misuse of research data on the mechanisms by which certain RNA binding proteins like TDP-43, FUS and others can be activated to form disease causing prions. The fact that this research, which could be used for bioweapons development, is funded by private organizations including the Bill and Melinda Gates Foundation, and Ellison Medical Foundation [2] without national/international oversight is also a concern. In the past, for example, there were prohibitions for publishing information pertaining to construction of nuclear bombs.

Published data has shown that there are several different factors that can contribute to the conversion of certain RNA binding proteins including TDP-43, FUS and related molecules to their pathologic states. These RNA binding proteins have many functions and are found in both the nucleus and the cytoplasm. These binding proteins have amino acid regions, binding motifs that bind specific RNA sequences. Binding to certain RNA sequences when the proteins are in the cytoplasm is believed to cause the molecules to fold in certain ways leading to pathologic aggregation and prion formation in the cytoplasm [2]. The current analysis indicates Pfizer's RNA based COVID-19 vaccine contains many of these RNA sequences that have been shown to have high affinity for TDP-43 or FUS and have the potential to induce chronic degenerative neurological diseases.

Zinc binding to the RNA recognition motif of TDP-43 is another mechanism leading to formation of amyloid like aggregations [9]. The viral spike protein, coded by the vaccine RNA sequence, binds ACE2 an enzyme containing zinc molecules [8]. This interaction has the potential to increase intracellular zinc levels leading to prion disease. The initial binding could be between spike proteins on the surface of the cell transfected by the vaccine and ACE2 on the surface of an adjacent cell. The resulting complex may become internalized. Alternatively, the interaction could initially take place in the cytoplasm of a cell that makes ACE2 and has been transfected with the vaccine RNA coding for the spike protein. The interaction is quite concerning given the belief that the virus causing COVID-19, SARS-CoV-2, is a bioweapon [10,11] and it is possible that the viral spike protein may have been designed to cause prion disease.

Another related concern is that the Pfizer vaccine uses a unique RNA nucleoside 1-methyl-3'-pseudouridylyl (Ψ). According to FDA briefing documents, this nucleoside was chosen to reduce activation of the innate immune system [12]. RNA molecules containing this nucleoside will undoubtedly have altered binding [13]. Unfortunately, the effect on TDP-43, FUS and other RNA binding proteins is not published. The use of this nucleoside in a vaccine can potentially enhance the binding affinity of RNA sequences capable of causing TDP-43 and FUS to assume toxic configurations.

There are many other potential adverse events that can be induced by the novel RNA based vaccines against COVID-19. The vaccine places a novel molecule, spike protein, in/on the surface of host cells. This spike protein is a potential receptor for another possibly novel infectious agent. If those who argue that the COVID-19 is actually a bioweapon are correct, then a second potentially more dangerous virus may be released that binds spike protein found on the host cells of vaccine recipients. Data is not publicly available to provide information on how long the vaccine RNA is translated in the vaccine recipient and how long after translation the spike protein will be present in the recipient's cells. Such studies pertaining to in vivo expression will be complex and challenging. Genetic diversity protects species from mass casualties caused by infectious agents. One individual may be killed by a virus while

another may have no ill effects from the same virus. By placing the identical receptor, the spike protein, on cells of everyone in a population, the genetic diversity for at least one potential receptor disappears. Everyone in the population now becomes potentially susceptible to binding with the same infectious agent.

Autoimmunity and the opposing condition, metabolic syndrome, are well known adverse events caused by vaccines [14]. COVID-19 infections are associated with the induction of autoantibodies and autoimmune disease [15,16] making it more than plausible a vaccine could do the same. One author has found amino acid sequences coded by the spike protein to be identical to sequences in human proteins including proteins found in the CNS [17]. Autoimmunity can also be induced by epitope spreading when a foreign antigen, like the spike protein, is presented by an antigen presenting cell that also has self molecules attached to its MHC molecules.

Finally, others working in the field have published additional support that COVID-19 vaccines could potentially induce prion disease. Authors [18] found prion related sequences in the COVID-19 spike protein which were not found in related coronaviruses. Others [19] have reported a case of prion disease, Creutzfeldt-Jakob disease, initially occurring in a man with COVID-19.

Many have raised the warning that the current epidemic of COVID-19 is actually the result of a bioweapons attack released in part by individuals in the United States government [10,11]. Such a theory is not far fetched given that the 2001 anthrax attack in the US originated at Fort Detrick, a US army bioweapon facility. Because the FBI's anthrax investigation was closed against the advice of the lead FBI agent in the case, there are likely conspirators still working in the US government. In such a scenario the primary focus of stopping a bioweapons attack must be to apprehend the conspirators or the attacks will never cease. Approving a vaccine, utilizing novel RNA technology without extensive testing is extremely dangerous. The vaccine could be a bioweapon and even more dangerous than the original infection.

References

1. Classen JB, Classen DC. Clustering of cases of insulin dependent diabetes (IDDM) occurring three years after Hemophilus influenza B (HiB) immunization support causal relationship between immunization and IDDM. *Autoimmunity*. 2002; 35: 247-253.
2. King OD, Gitler AD, Shorter J. The tip of the iceberg: RNA-binding proteins with prion-like domains in neurodegenerative disease. *Brain Res*. 2012; 1462: 61-80.
3. WHO, International Non Proprietary Names Program: 11889. 9/2020.
4. Kapeli K, Pratt GA, Vu AQ, et al. Distinct and shared functions of ALS-associated proteins TDP-43, FUS and TAF15 revealed by multisystem analyses. *Nature Communications*. 2016; 7: 12143.
5. Kuo P, Chiang C, Wang Y, et al. The crystal structure of TDP-43 RRM1-DNA complex reveals the specific recognition for UG- and TG-rich nucleic acids. *Nucleic Acids Research*. 2014; 42: 4712-4722.
6. Tollervey JR, Curk T, Rogelj B, et al. Characterizing the RNA targets and position-dependent splicing regulation by TDP-43; implications for neurodegenerative diseases. *Nat Neurosci*. 2011; 14: 452-458.
7. Imperatore JA, McAninch DS, Valdez-Sinon AN, et al. FUS recognizes G quadruplex structures within neuronal mRNAs. *Frontiers in Molecular Biosciences*. 2020; 7: 6.
8. Shang J, Ye G, Shi K, et al. Structural basis of receptor recognition by SARS-CoV-2. *Nature*. 2020; 581: 221-225.
9. Garnier C, Devred F, Byrne D, et al. Zinc binding to RNA recognition motif of TDP-43 induces the formation of amyloid-like aggregates. *Sci Rep*. 2017; 7: 6812.
10. Classen JB. COVID-19, MMR vaccine, and bioweapons. *Diabetes & its Complications*. 2020; 4: 1-8.
11. Classen JB. Evidence supporting the hypothesis that the 2019 epidemic of E-vaping acute lung injury (EVALI) was caused in part by COVID-19. *Diabetes & Complications*. 2020; 4: 1-2.
12. Pfizer-Biotech: COVID-19 Vaccine (BNT162, PF-07302048), Vaccines and Related Biological Products Advisory Committee Briefing Document. Meeting Date: 10 December 2020.
13. Roundtree IA, Evans ME, Pan, et al. Dynamic RNA modifications in gene expression regulation. *Cell*. 2017; 169: 1187-1200.
14. Classen JB. Review of Vaccine Induced Immune Overload and the Resulting Epidemics of Type 1 Diabetes and Metabolic Syndrome. Emphasis on Explaining the Recent accelerations in the Risk of Prediabetes and other Immune Mediated Diseases. *J Mol Genet Med*. 2014; S1: 025.
15. Amiral J. Can COVID-19 Induce an autoimmune disease associated with long- lasting symptoms and delayed complications? *Ann Clin Immunol Microbiol*. 2020; 2: 1014.
16. Wang EY, Mao T, Klein J, et al. Diverse functional autoantibodies in patients with COVID-19. *medRxiv preprint*. 2020.
17. Lyons-Weiler J. Pathogenic priming likely contributes to serious and critical illness and mortality in COVID-19 via autoimmunity. *Journal of Translational Autoimmunity*. 2020; 3: 100051.
18. Tetz G, Tetz V. SARS-CoV-2 prion-like domains in spike proteins enable higher affinity to ACE2. *Preprint*. 2020.
19. Young MJ, O'Hare M, Mantiello M, et al. Creutzfeldt-Jakob disease in a man with COVID-19: SARS-CoV-2-accelerated neuro degeneration? *Brain, Behavior, and Immunity*. 2020; 89: 601-603.

April 30, 2021

The novel coronavirus' spike protein plays additional key role in illness

Salk researchers and collaborators show how the protein damages cells, confirming COVID-19 as a primarily vascular disease

LA JOLLA—Scientists have known for a while that SARS-CoV-2's distinctive "spike" proteins help the virus infect its host by latching on to healthy cells. Now, a major new study shows that the virus spike proteins (which behave very differently than those safely encoded by vaccines) also play a key role in the disease itself.

The paper, published on April 30, 2021, in *Circulation Research*, also shows conclusively that COVID-19 is a vascular disease, demonstrating exactly how the SARS-CoV-2 virus damages and attacks the vascular system on a cellular level. The findings help explain COVID-19's wide variety of seemingly unconnected complications, and could open the door for new research into more effective therapies.

- Photo removed for printing purposes. Caption: "Representative images of vascular endothelial control cells (left) and cells treated with the SARS-CoV-2 Spike protein (right) show that the spike protein causes increased mitochondrial fragmentation in vascular cells.

Click here for a high-resolution image: <https://www.salk.edu/wp-content/uploads/2021/04/manor-figure.png>

Credit: Salk Institute"

"A lot of people think of it as a respiratory disease, but it's really a vascular disease," says Assistant Research Professor Uri Manor, who is co-senior author of the study. "That could explain why some people have strokes, and why some people have issues in other parts of the body. The commonality between them is that they all have vascular underpinnings."

Salk researchers collaborated with scientists at the University of California San Diego on the paper, including co-first author Jiao Zhang and co-senior author John Shyy, among others.

While the findings themselves aren't entirely a surprise, the paper provides clear confirmation and a detailed explanation of the mechanism through which the protein damages vascular cells for the first time. There's been a growing consensus that SARS-CoV-2 affects the vascular system, but exactly how it did so was not understood. Similarly, scientists studying other coronaviruses have long suspected that the spike protein contributed to damaging vascular endothelial cells, but this is the first time the process has been documented.

In the new study, the researchers created a "pseudovirus" that was surrounded by SARS-CoV-2 classic crown of spike proteins, but did not contain any actual virus. Exposure to this pseudovirus resulted in damage to the lungs and arteries of an animal model—proving that the spike protein alone was enough to cause disease. Tissue samples showed inflammation in endothelial cells lining the pulmonary artery walls.

The team then replicated this process in the lab, exposing healthy endothelial cells (which line arteries) to the spike protein. They showed that the spike protein damaged the cells by binding ACE2. This binding disrupted ACE2's molecular signaling to mitochondria (organelles that generate energy for cells), causing the mitochondria to become damaged and fragmented.

Previous studies have shown a similar effect when cells were exposed to the SARS-CoV-2 virus, but this is the first study to show that the damage occurs when cells are exposed to the spike protein on its own.

"If you remove the replicating capabilities of the virus, it still has a major damaging effect on the vascular cells, simply by virtue of its ability to bind to this ACE2 receptor, the S protein receptor, now famous thanks to COVID," Manor explains. "Further studies with mutant spike proteins will also provide new insight towards the infectivity and severity of mutant SARS CoV-2 viruses."

The researchers next hope to take a closer look at the mechanism by which the disrupted ACE2 protein damages mitochondria and causes them to change shape.

Other authors on the study are Yuyang Lei and Zu-Yi Yuan of Jiaotong University in Xi'an, China; Cara R. Schiavon, Leonardo Andrade, and Gerald S. Shadel of Salk; Ming He, Hui Shen, Yichi Zhang, Yoshitake Cho, Mark Hepokoski, Jason X.-J. Yuan, Atul Malhotra, Jin Zhang of the University of California San Diego; Lili Chen, Qian Yin, Ting Lei, Hongliang Wang and Shengpeng Wang of Xi'an Jiaotong University Health Science Center in Xi'an, China.

The research was supported by the National Institutes of Health, the National Natural Science Foundation of China, the Shaanxi Natural Science Fund, the National Key Research and Development Program, the First Affiliated Hospital of Xi'an Jiaotong University; and Xi'an Jiaotong University.

DOI: 10.1161/CIRCRESAHA.121.318902
PUBLICATION INFORMATION

JOURNAL

Circulation Research

TITLE

SARS-CoV-2 Spike Protein Impairs Endothelial Function via
Downregulation of ACE2

AUTHORS

Yuyang Lei, Jiao Zhang, Cara R Schiavon, Ming He, Lili Chen, Hui Shen, Yichi Zhang, Qian Yin, Yoshitake Cho, Leonardo Andrade, Gerald S Shadel, Mark Hepokoski, Ting Lei, Hongliang Wang, Jin Zhang, Jason X-J Yuan, Atul Malhotra, Uri Manor, Shengpeng Wang, Zu-Yi Yuan, and John Y-J Shyy

JOEY GILBERT LAW

ATTORNEYS AT LAW
LICENSED IN NEVADA & CALIFORNIA

www.joeygilbertlaw.com
201 West Liberty Street, Suite 210
Reno, Nevada 89501

Telephone: (775) 284-7700
Facsimile: (775) 284-3809
joey@joeygilbertlaw.com

April 13, 2021

To Whom It May Concern:

This letter is being sent to you on behalf of many Nevadans, who have contacted Joey Gilbert Law requesting independent information regarding the safety and efficacy of forcing Nevadans and their minor children. Our findings raise significant concerns, both medically and legally. Masks are ineffective for the purpose claimed by your mandate, potentially harmful, and only authorized for use by an EUA.

Masks are ineffective and in many ways they harm.

It's a myth that masks prevent viruses from spreading. The overall evidence is clear: Standard cloth and surgical masks offer next to no protection against virus-sized particles or small aerosols.¹ The size of a virus particle is much too small to be stopped by a surgical mask, cloth or bandana. A single virion of SARS-CoV-2 is about 60-140 nanometers or 0.1 microns.² The pore size in a surgical mask is 200-1000x that size. Consider that the CDC website states, "surgical masks do not catch all harmful particles in smoke." And that the size of smoke particles in a wildfire are ~0.5 microns which is 5x the size of the SARS-CoV-2 virus! Wearing a mask to prevent catching SARSCoV-2, or similarly sized influenza, is like throwing sand at a chain-link fence: it doesn't work. There has been one large randomized controlled trial that specifically examined whether masks protect their wearers from the coronavirus. This study found mask wearing "did not reduce, at conventional levels of statistical significance, the incidence of Sars-Cov-2 infection."³

Consider also, that the existence of more particles does not mean more virus. Research shows less virus does not mean less illness. Dr. Kevin Fennelly, a pulmonologist at the National Heart, Lung and Blood Institute debunked the view that larger droplets are responsible for viral transmission. Fennelly wrote:

"current infection control policies are based on the premise that most respiratory infections are transmitted by large respiratory droplets- i.e., larger than 5 [microns] – produced by coughing and sneezing, ...Unfortunately, that premise is wrong."⁴

Fennelly referenced a 1953 paper on anthrax that showed a single bacterial spore of about one micron was significantly more lethal than larger clumps of spores.⁵ Exposure to one virus particle is theoretically enough to cause infection and subsequent disease. This is not an alarming thought - it simply means what it has always meant, that our immune system protects us continually all our life.⁶

There have been hundreds of mask studies related to influenza transmission done over several decades. It is a well-established fact that masks do not stop viruses. "Part of that evidence shows that cloth face masks actually increase influenza-linked illness."⁷ Bacteria are 50x larger than virus

particles.⁸ As such, virus particles can enter through the mask pores, yet bacteria remain trapped inside of the mask, resulting in the mask-wearer continually exposed to the bacteria.

Related to the 1918-1919 influenza pandemic, there was almost universal agreement among experts, that deaths were virtually never caused by the influenza virus itself but resulted directly from severe secondary pneumonia caused by well-known bacterial "pneumo pathogens" that colonized the upper respiratory tract.⁹ Dr. Fauci and his National Institute of Health studied pandemics and epidemics and concluded, "the vast majority of influenza deaths resulted from secondary bacterial pneumonia."¹⁰

All parties mandating the use of facemasks are not only willfully ignoring established science but are engaging in what amounts to a whole school clinical experimental trial. This conclusion is reached by the fact that facemask use and COVID-19 incidence are being reported in scientific opinion pieces promoted by the CDC and others.¹¹ The fact is **after reviewing ALL of the studies worldwide, the CDC found "no reduction in viral transmission with the use of face masks."**¹²

Additionally, children have been repeatedly shown not to be drivers of this contagion. It is well accepted that children have a statistically zero chance of dying from COVID. The CDC shows the K-12 mortality rate from or with COVID is .00003.¹³ Any intervention, especially one that is prophylactic, must cause fewer harms to the recipient than the infection. Since children have the lowest death rate from COVID infection, the cost-benefit of requiring children to wear an investigational face-covering with emerging safety issues is especially difficult to justify. Anthony Fauci was very clear that asymptomatic transmission was not a threat. He stated, "in all the history of respiratory-borne viruses of any type, asymptomatic transmission has never been the driver of outbreaks. The driver of outbreaks is always a symptomatic person."¹⁴

Wearing respirators come(s) with a host of physiological and psychological burdens. These can interfere with task performances and reduce work efficiency. These burdens can even be severe enough to cause life-threatening conditions if not ameliorated.¹⁵ Fifteen years ago, National Taiwan University Hospital concluded that the use of N-95 masks in healthcare workers caused them to experience hypoxemia, a low level of oxygen in the blood, and hypercapnia, an elevation in the blood's carbon dioxide levels.¹⁶ Studies of simple surgical masks found significant reductions in blood oxygen as well. In one particular study, researchers measured blood oxygenation before and after surgeries in 53 surgeons. Researchers found the mask reduced the blood oxygen levels significantly, and the longer the duration of wearing the mask, the greater the drop in blood oxygen levels.¹⁷

Moreover, people with cancer, will be at a further risk from hypoxia, as cancer cells grow best in a bodily environment that is low in oxygen. Low oxygen also promotes systemic inflammation which, in turn, promotes "the growth, invasion and spread of cancers."¹⁸ Repeated episodes of low oxygen, known as intermittent hypoxia, also "causes atherosclerosis" and hence increases "all cardiovascular events" such as heart attacks, as well as adverse cerebral events like stroke.¹⁹

Wearing facemasks has been demonstrated to have substantial adverse physiological and psychological effects. These include hypoxia, hypercapnia, shortness of breath, increased acidity and toxicity, activation of fear and stress response, rise in stress hormones, immunosuppression, fatigue, headaches, decline in cognitive performance, predisposition for viral and infectious illnesses, chronic stress, anxiety and depression. Long-term consequences of wearing facemask can cause health deterioration, developing and progression of chronic diseases and premature death.²⁰

Masks cause physical, psychological, and pedagogical damage to our children. A German court recently ruled that schools be prohibited from requiring students to wear any type of mouth-nose covering (especially qualified masks such as FFP2 masks), to comply with social distancing guidelines, and/or to participate in SARS-CoV-2 rapid testing. The judge sided with the child protection case, stating that children are being physically, psychologically and pedagogically damaged without any benefit for the children or third parties. At the same time, the court determined that classroom instruction must be maintained. The judge concluded by saying, "Such a danger is present here. Because the children are not only endangered in their mental, physical and psychological well-being in particular by the obligation to wear face masks during the school time and to keep distances among themselves and to further persons, but beyond that already presently damaged."²¹

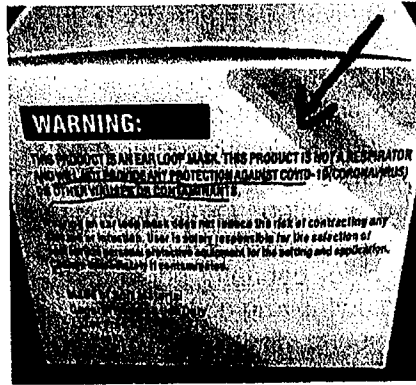
Informed consent is required for investigational medical therapies.

Regardless of the lack of safety and efficacy behind the decision to require a child to wear a mask, it is illegal to mandate EUA approved investigational medical therapies without informed consent. Mask use for viral transmission prevention is authorized for Emergency Use only.²² Emergency Use Authorization by the FDA, means "the products are investigational and experimental" only.²³ The statute granting the FDA the power to authorize a medical product of emergency use requires that the person being administered the unapproved product be advised of his or her right to refuse administration of the product.²⁴ This statute further recognizes the well-settled doctrine that medical experiments, or "clinical research," may not be performed on human subjects without the express, informed consent of the individual receiving treatment.²⁵

The right to avoid the imposition of human experimentation is fundamental, rooted in the Nuremberg Code of 1947, has been ratified by the 1964 Declaration of Helsinki, and further codified in the United States Code of Federal Regulations. In addition to the United States regarding itself as bound by these provisions, these principles were adopted by the FDA in its regulations requiring the informed consent of human subjects for medical research.²⁶ The State of California has adopted the Nuremberg principles as well, via Health & Safety Code § 24170, which again requires informed consent for human trial subjects.²⁷ The law is very clear; it is unlawful to conduct medical research (even in the case of emergency), unless steps taken to ... secure informed consent of all participants.²⁸

Furthermore, by requiring children to wear a mask, you are promoting the idea that the mask can prevent or treat a disease, which is an illegal deceptive practice. It is unlawful to advertise that a product or service can prevent...disease unless you possess competent and reliable scientific evidence... substantiating that the claims are true.²⁹

The FDA EUA for surgical and/or cloth masks explicitly states, "the labeling must not state or imply... that the [mask] is intended for antimicrobial or antiviral protection or related, or for use such as infection prevention or reduction."³⁰ As you can see from the image below, masks do not claim to keep out viruses.



Illegally mandating an investigational medical therapy generates liability.

There are no efficacy standards on child-sized masks and respirators under OSHA, but there are proven microbial challenges as well as breathing difficulties that are created and exacerbated by masking children.

Requiring children to wear a mask sets the stage for contracting any infection, including COVID19, and making the consequences of that infection much graver. In essence, a mask may very well put children at an increased risk of infection, and if so, having a far worse outcome.³¹

The fact that mask wearing presents a severe risk of harm to the wearer should – standing alone – not be required for children, particularly given that these children are not ill and have done nothing wrong that would warrant an infringement of their constitutional rights and bodily autonomy. Promoting use of a non-FDA approved, Emergency Use Authorized mask, is unwarranted and illegal. This mandate is in direct conflict with Section 360bbb-3€(1)(A)(ii)(I-III), which requires the wearer to be informed of the option to refuse the wearing of such “device.” Misrepresenting the use of a mask as being intended for antimicrobial or antiviral protection, and/or misrepresenting masks for use as infection prevention or reduction is a deceptive practice under the FTC. It is clear, there is no waiver of liability under deceptive practices, even under a state of emergency. As such, forcing children to wear masks, or similarly forcing the use of any other non-FDA approved medical product without the child's (or the child's parental) consent, is illegal and immoral.

This letter serves as official notice that We the People do not consent to being forced to wear a mask. Advocates will not fail to take the maximum action permissible under the law against your organization, and against you personally. Accordingly, Joey Gilbert Law urges you to comply with Federal and State law, and advise everyone they have a right to refuse to wear a mask as a measure to prevent or reduce infection from COVID-19. Any other course of action is contrary to the law. Joey Gilbert Law is willing to testify as to the veracity of the contents in this document. Please confirm no further pressure will be exerted upon anyone to follow this illegal mask mandate, and that no one will face any retaliatory disciplinary action.

Sincerely,

Joey Gilbert

- 1 <https://www.jamanetwork.com/article.aspx?doi=10.1001/jamainternmed.2020.4221>
- 2 Berenson, A (November 24, 2020). Unreported Truths about Covid-19 and Lockdowns: Part 3: Masks
- 3 <https://www.acpjournals.org/doi/10.7326/M20-6817>
- 4 [https://www.thelancet.com/journals.lanres/article/PIIS2213-2600\(20\)30323-4/fulltext](https://www.thelancet.com/journals.lanres/article/PIIS2213-2600(20)30323-4/fulltext)
- 5 [https://www.thelancet.com/journals.lanres/article/PIIS2213-2600\(20\)30323-4/fulltext](https://www.thelancet.com/journals.lanres/article/PIIS2213-2600(20)30323-4/fulltext)
- 6 <https://www.sciencedaily.com/releases/2009/03/090313150254.htm>
- 7 <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4420971/>
- 8 <https://www.merriam-webster.com/words-at-play/virus-vs-bacteria-difference>
- 9 The pathology and bacteriology of pneumonia following influenza. Chapter IV, Epidemic respiratory disease. The pneumonias and other infections of the respiratory tract accompanying influenza and measles, 1921 St. Louis CV Mosby (p. 107-281)
- 10 <https://academic.oup.com/jid/article/198/7/962/2192118>
- 11 <https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/cloth-face-cover-guidance.html>
- 12 Non Pharmaceutical Measures for Pandemic Influenza in Non Healthcare Settings—Personal Protective and Environmental Measures, Jingyi Xiao¹, Eunice Y. C. Shiu¹, Huizhi Gao, Jessica Y. Wong, Min W. Fong, Sukhyun Ryu, and Benjamin J. Cowling (Volume 26, Number 5, May of 2020).
- 13 <https://www.cdc.gov/coronavirus/2019-ncov/community/schoolschildcare/k-12-testing.html>
- 14 <https://www.youtube.com/watch?v=X1orSO094uY>
- 15 Arthur Johnson, Journal of Biological Engineering (2016).
- 16 The Physiological Impact of N95 Masks on Medical Staff, National Taiwan University Hospital (June 2005).
- 17 Bader A et al. Preliminary report on surgical mask induced deoxygenation during major surgery. Neurocirugia 2008;19:12-126..
- 18 Aggarwal BB. Nuclear factor-kappaB: The enemy within. Cancer Cell 2004;6:203-208, and Blaylock RL. Immunoexcitatory mechanisms in glioma proliferation, invasion and occasional metastasis. Surg Neurol Inter 2013;4:15.
- 19 Savransky V et al. Chronic intermittent hypoxia induces atherosclerosis. Am J Resp Crit Care Med 2007;175:1290-1297.
- 20 Vainshelboim, Baruch. Facemasks in the COVID-19 era: A health hypothesis * Cardiology Division, Veterans Affairs Palo Alto Health Care System/Stanford University
<https://www.journals.elsevier.com/medical-hypotheses>
- 21 <https://tapnewswire.com/2021/04/sensational-verdict-from-germany-no-masks-no-distancing-no-more-cv-tests-for-students/>
- 22 <https://www.fda.gov/media/137121/download>
- 23 <https://ca.childrenshealthdefense.org/wp-content/uploads/CDE-Superintendent-Letter0from-Childrens-HealthDefense-California-Chapter.pdf>
- 24 21 U.S.C. § 360bbb-3 (The FD&C Act)
- 25 21 U.S.C. § 360bbb-3(e)(1)(A) ("Section 360bbb-3")
- 26 C.F.R. § 50.20
- 27 California is not the only state to encode the Nuremberg principles. See, e.g., Pub NY Health Ch. 45, Art. 24-a (mandating informed consent in human research); VA Code Ann. § 32.1-162.18 (same).
- 28 <http://www.invertedalchemy.com/2020/12/belief-is-not-medical-counter-measure.html>, 21 C.F.R. § 50.23, 21 C.F.R. § 50.20 21 C.F.R. § 50.24

///

29 FTC Act, 15 U.S. Code § 41

30 <https://www.fda.gov/media/137121/download>

31 Russell Blaylock, id. (quoting Shehade H et al. Cutting edge: Hypoxia-Inducible Factor-1 negatively regulates Th1 function. J Immunol 2015;195:1372-1376. See also: Westendorf AM et al. Hypoxia enhances immunosuppression by inhibiting CD4+ effector T cell function and promoting Treg activity. Cell Physiol Biochem 2017;41 : 1271-84. See further: Scenery J et al. Hypoxia-driven immunosuppression contributes to the premetastatic niche. Oncoimmunology 2013;2:1 e22355.

Coronavirus Update:

FDA issues
Emergency Use
Authorization for third
COVID-19 vaccine



COVID 19

VACCINATION

Abstract

LINKS TO THE TRUTH: GENE THERAPY VACCINES
COVID-19 is not a Health Issue, it's a Power Transition...
Dr. Reiner Fuellmich.

Jaye Torley / Richard Pelzer
jayetorley@gmail.com

FAIR USE POLICY

FAIR DEALING

What is fair dealing?

Fair dealing is for everyone. You probably make use of fair dealing every day without even realizing it, whether emailing a news article to a friend, using a clip from a song, using a copyrighted image on social media, or quoting passages from a book when writing an essay. Activities such as these are not considered to be copyright infringement – in fact, the ability for users to make copies for specific purposes is an integral part of the Canadian Copyright Act. The Canadian Copyright Act allows the use of material from a copyright protected work (literature, musical scores, audiovisual works, etc.) without permission when certain conditions are met. People can use fair dealing for research, private study, education, parody, satire, criticism, review, and news reporting. In order to ensure your copying is fair, you need to consider several factors such as the amount you are copying, whether you are distributing the copy to others, and whether your copying might have a detrimental effect on potential sales of the original work.

What is the purpose of fair dealing?

Fair dealing recognizes that certain uses of copyright protected works are beneficial for society. By placing limits on instances where copyright owners can require payment, fair dealing leads innovation, to the creation of new works and new scholarship. The Supreme Court of Canada increasingly refers to copyright as providing a balance between the rights of users and of copyright owners. Fair dealing has a large, positive impact, including for: Educators and students at all levels, Creative professionals (journalists, authors, filmmakers, musicians, etc.), Individuals who want to use, copy or share portions of copyright protected works in their daily lives.

The following is an open source document. It's not meant to follow an academic form. It's meant to be open, collaborative, informal & informational. It's designed to be for the "every person". It's designed for quick reference. The main theme is access to knowledge, access to truth. Some links may be broken. Some hosts like YouTube have chosen to limit content based on their bias. We all have them, they can have theirs too. We have chosen to present this as an open document. We hope that others will want to explore it and even add to it. We only ask one favour. When you add to it, please send us the content, we will add to the larger document then repost with the updated content. Please send content to jayetorley@gmail.com. (please note: we reserve the right to add/delete/update content at our sole discretion. Based on our bias – of course. ☺) Email jayetorley@gmail.com and ask to be put on the distribution list. Our desire is to send out updates weekly (Friday). If you'd like to make suggestions, email us directly.

PLEASE BE ADVISED. Every effort has been made to check and confirm URL's. Big Tech has been delisting certain sites for breach of their internal policies. The content providers have moved away from platforms like YouTube and moved towards Bitchute and other providers of the same ilk. Where possible we have added in the new URL's. We may have missed a few, you'll need to continue to do your research.

The authors of this document are not lawyers, doctors or financial advisors. The following information is for educational purposes only. The reader alone is responsible for doing their own research and drawing their own conclusions. None of the content should be interpreted as legal, medical, financial or tax advice. Professional advice should be sought by those that require it.

ARE YOU AWAKE?

THE JOURNEY

Reading the following implies thinking, discernment, and a general understanding of what it is to gather, assimilate and disseminate the truth. Those that read through this document they will find it farfetched, hard to believe and surely in the minds of some ... ridiculous, they will put this document aside and consider it the ramblings of the insane. Still for others, this may confirm what they sense and feel inside. Regardless, for those that have taken the time to do so, this type of information will open up new lines of thinking, discussion, and requirement for new types of strategies. We live in perilous times; we are in the middle of a third world war. Like all wars, the first casualty of war is THE TRUTH. We do not assert to have THE TRUTH all wrapped up and codified. Rather, a seeker of it. Should one assume that all the info to follow is all truth and nothing but the truth? No! THE TRUTH is found when sought. The following is a compilation of observations and reviews of hundreds of on-line videos. Some support, others contradict. Still, we find ourselves ever pushing towards THE TRUTH. It is the Wisdom of God to search a matter out. It is the hope of this author that the reader will be able to keep his or her mind open to that which is before them.

My bias. We all have one. I'm a Christian, it is the grid from which I view the world. It's my TRIBE. I'm open to new thoughts, concepts, ideas, still I find myself defaulting to my strongly held beliefs. God is in control. One of my scholarly teachers once made a statement followed by a question. "The Bible is all truth! BUT is all truth in the bible?". At first pass a simple concept, but through every subsequent pass, even more profound. Could it be that God leaves breadcrumbs? Could it be that God speaks through various venues, time periods, cultures, belief systems? Perhaps, I'm definitely on the Christian World View side of the equation.

My journey began in March 2020 after speaking with one of my siblings whose husband had contracted COVID-19. Upon completion of this telephone call, I spoke with my wife about my needing to go to British Columbia for what I believed at the time, certain death of my ailing brother-in-law. Surely after 4 strokes in two years, if there was ever a concern around comorbidity and death, my bother-in-law was the perfect candidate. Two weeks later, he was declared Covid Free!

In the summer of 2020, my sister-in-law contacted C-19. Her symptoms? A headache. She self isolated for two weeks. Today? Like it never happened. Her health restored. Her body did what her ancestor's bodies had done for millennia, make itself whole.

The things that make you go hmmmmmm!?

In the fall of 2020, I had a medical doctor friend of mine come and see me for a visit. Inevitably, the topic of Covid19 came up. I asked the questions, "so Doc, this whole C19 thing, true or not true, danger – real, danger – perceived?" His answer? "Well, it all depends." (great, a doctor sounding like a lawyer!) ☺. Ok, explain please Doc.

Verbatim...

"the really young – newborns and the really old – with comorbidities" (there's real concern). Everyone else? Very little. So, Jaye let's see if you're good in math. The average person breaths out 40 droplets with each breath, in order for someone to even come close to getting C19 they need to breath in 1,000 droplets, that could only happen if they were literally right in front of

them. So, Jaye, how many times would someone have to be right in front of you breathing into your face and you drawing in their direct breath? The answer is 25 ($1,000 / 40 = 25$). Correct he said. I started to laugh. That never happens I said. I guess that's why Dr. Tam wanted us to wear a mask while making love, I quipped. We both laughed.

More recently, (Sunday April 11, 2021), I sent a messenger message to another doctor friend of mine. This time a chiropractor. (yes, I'm well aware of what medical doctors think about chiropractors ... visa/versa). Any who, here's the dialogue,

Q: Dr. What are your thoughts on the C19 vaccine?

A: Well, I would advise EVERYONE to do their own research. I am not allowed to tell you what to do or what the truth is. But, I can tell you I would never take anything of the sort. **It's not a vaccine more of a gene therapy.** No thanks!

So, let's be clear.

- 1) I don't have all the answers. I'm simply thinking through the issues of the day. To me, nothing that I've seen in my lifetime. The stakes are high, emotions all over the place. People are so easily offended. It seems like people have lost the ability to be civil and agree, or agree to disagree. Then people make personal character remarks. Wow! I guess cancel culture has really taken root in the world. I don't like it one little bit.
- 2) I don't pretend to be a doctor, lawyer, financial advisor. I need these professionals to help guide, inform and educate me. I'm opening myself up to you to teach me, share with me your thoughts and feelings. Personalities aside, we are in this life together and none of us is getting out alive. The human interaction is essential for growth. Any person who claims to have all the answers is a cult leader and should be avoided at any cost. In truth, we see things differently, it's supposed to be that way. The humble learn, the arrogant divide, diffuse, dilute and eventually bring death. Let's choose life, let's choose to work with each other and learn.
- 3) This research paper is not meant to be an academic treatise. Its format is informal, unstructured and open. Originally starting off as 12 or so pages, it's now double that, by the time we're done, I'm sure it will have doubled again, again and again.
- 4) Interaction: There's little interaction with the reader. The authors simply present the info, provide the link based on topic or title. The reader has the power to follow the link or not. The reader has the power to interact with the content/video link etc. based on their interest. Again, we draw no personal conclusions. Rather, we allow the reader to do so. We are well beyond telling people how to think or what to do. We simply give access to the info.
- 5) Balanced argument. All media has bias. Current media is no exception. This document will not attempt to provide a balanced argument. This document is on the other side of the content argument. It should be balanced against other sources in order for the reader to draw their own conclusions.
- 6) Click the links. Some links are stand alone while others are followed by paragraphs. The reader is encouraged to click each link. The rich content is contained therein.
- 7) Take the vaccine! Don't take the vaccine! The reader alone must decide. Free will!
- 8) NEW TRUTHER PLATFORM – BRANDNEWTUBE. This new website takes place of de-platforming sites like YouTube.
- 9) One thing we know for sure, people all over the world know that there's something incredibly wrong with what we see, hear and know. Let's explore together.

COVID19 VACCINATION

It is generally understood that at any time a foreign substance is directly introduced into the physical body (specifically the blood system), potential side effects may ensue. The world has been looking for a solution. It has spared no expense in initiating the largest and most well known pharma corps in human history. AstraZeneca, Pfizer, Moderna and others of this ilk have brought their solution to the global market. For over a year now the world has waited for these "miracle" salvific drugs. The

premise of "millions dying" is being challenged. Data gatherers, statisticians, doctors, research analysts and even the lawyers are getting involved. Each within their field of expertise they are gathering and reporting on their finding. Conspiracy Theory? Conspiracy Fact? Is there a global "cabal" a "new world order?" Is there a Global Economic Forum? Is there a global strategy in play to depopulate the world? How about high tech oligarchs and their vision of infusing their products into every living soul and tying it into AI? Well, we're getting beyond ourselves, aren't we?! So, let's define the problem that is demanding that everyone be vaccinated. Well, it's a pandemic! No, it's a highly infectious disease similar the SARS. No, it is SARS?! SARS-CoV-2 infection diagnosed only by cell culture isolation before the local outbreak in an Italian seven-week-old suckling baby. Some would say that not even the virus that causes COVID-19 has been isolated. Fact check: The virus that causes COVID-19 has been isolated, and is the basis for the vaccines currently in development. OK, so the threat is real? See above graphic. The threat is real, what about survival rate? Doesn't seem to be an issue, if the graphic is correct.

Centers for Disease Control and Prevention CDC 2021 Saving Lives Through Vaccines™		
Updated infection fatality - survival rates for COVID19:		
Parameter Values vary among the five COVID-19 Pandemic Planning Scenarios		
CDC SCENARIO 4 (Current Best Estimate)		
AGE GROUP	INFECTION FATALITY RATE	SURVIVAL RATE
0 -19	0.00003%	99.997%
20 -49	0.0002%	99.998%
50 -69	0.005%	99.5%
70 +	0.054%	94.6%

STATS CANADA – WHAT ARE THE REAL REPORTED NUMBERS?

The following graph was compiled by Mr. Ryan Alarcon and is used with his permission. Source: Stats Canada website (link below) and is accurate as of 4/30/21. (reporting is typically one week behind)

Age	Cases	Deaths	Population	Population Infected		Infected vs. Deceased		Population Deceased	
				%	per million	%	per million	%	per million
0-19	218,750	9	8,139,512	2.7%	26,875	0.004%	41	0.0001%	1
20-29	226,191	44	5,128,042	4.4%	44,109	0.02%	195	0.0009%	9
30-39	193,726	98	5,292,403	3.7%	36,605	0.05%	506	0.002%	19
40-49	176,047	224	4,854,363	3.6%	36,266	0.13%	1,272	0.005%	46
50-59	159,251	712	5,194,811	3.1%	30,656	0.45%	4,471	0.01%	137
60-69	99,466	2,006	4,727,506	2.1%	21,040	2.02%	20,168	0.04%	424
70-79	54,008	4,741	3,004,925	1.8%	17,973	8.8%	87,783	0.16%	1,578
80+	67,361	16,195	1,663,666	4.0%	40,489	24.0%	240,421	0.97%	9,735
TOTAL	1,194,800	24,029	38,005,228	3.1%	31,438	2.01%	20,111	0.06%	632
20-59	755,215	1,078	20,469,619	3.7%	36,894	0.14%	1,427	0.01%	53
50-79	312,725	7,459	12,927,242	2.4%	24,191	2.39%	23,852	0.06%	577
<80	1,127,439	7,834	36,341,562	3.1%	31,023	0.69%	6,948	0.02%	216

Source of Cases and Deaths by Age <https://health-infobase.canada.ca/covid-19/epidemiological-summary-covid-19-cases.html>
 Source of Population by Age <https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1710000501>

- 1) Dr. Reginald Bibby: WHY ARE WE STILL FOCUSED ON CASES VS OUTCOME? THE GLOBAL DEMOGRAPHICS ARE CLEAR. Go to this LinkedIn page for regular updates.
- 2) STATEMENT BY UK GOVERNMENT: Status of COVID-19

"As of 19 March 2020, COVID-19 is no longer considered to be a high consequence infectious disease (HCID) in the UK." PLEASE NOTE: The CDC made a similar disclosure March 16, 2020. The following is a direct/copy/paste from the site. Follow links below for full context and details.

The 4 nations public health HCID group made an interim recommendation in January 2020 to classify COVID-19 as an HCID. This was based on consideration of the UK HCID criteria about the virus and the disease with information available during the early stages of the outbreak. Now that more is known about COVID-19, the public health bodies in the UK have reviewed the most up to date information about COVID-19 against the UK HCID criteria. They have determined that several features have now changed; in particular, more information is available about mortality rates (low overall), and there is now greater clinical awareness and a specific and sensitive laboratory test, the availability of which continues to increase.

The Advisory Committee on Dangerous Pathogens (ACDP) is also of the opinion that COVID-19 should no longer be classified as an HCID.

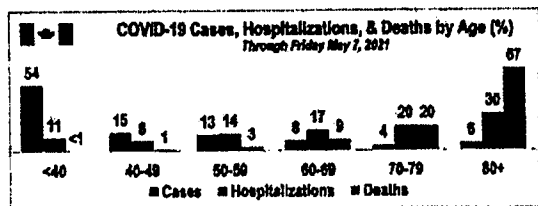
The need to have a national, coordinated specifically the blood) response remains, but this is being met by the government's COVID-19 response.

Cases of COVID-19 are no longer managed by HCID treatment centres only. All healthcare workers managing possible and confirmed cases should follow the updated national infection and prevention (IPC) guidance for COVID-19, which supersedes all previous IPC guidance for COVID-19. This guidance includes instructions about different personal protective equipment (PPE) ensembles that are appropriate for different clinical scenarios"

- 3) AMERICAN DOCTORS ADDRESS COVID-19 MISINFORMATION WITH SCOTUS PRESS CONFERENCE
- 4) AUSTRALIA'S BRAVEST MAN (AND HE'S 76 YEARS OLD) POLICE INTERVIEW
- 5) ROCCO GALATI – THE CONSTITUTIONAL RIGHTS CENTRE.
- 6) ROCCO GALATI – FILES 191 PAGE STATEMENT OF CLAIM – AGAINST FEDS AND PROVINCES

Reginald Bibby • 1st
Professor, Sociology, University of Lethbridge, Research Affiliate, Prentice Institute L
17h • 17h • 17h

Are Canada's COVID policies in touch with what we know about age?
#covid19 #canada #age #policies #bibby



Bottom-Line COVID-19 Demographic Facts Consistent from the Beginning

- A highly contagious, vicious virus with lethal effects on the physically fragile
- People of all ages can contract it; those 70 & over with comorbidities = most vulnerable
- Vaccines: may help to prolong lives – but will not prevent most deaths
- In 16 months: ~ 25,000 COVID-related deaths – that many people >70 die each month
- WHY? Life expectancy in Canada for all of us is 82

SOURCE:
Public Health Services, Government of Canada, May 7, 2021
Cases 1,275,106, Hospitalizations 84,494, Deaths 34,829
Graphics by Dr. Reginald Bibby, Sociologist, University of Lethbridge and
Research Affiliate, Prentice Institute for Global Population & Economy
Personal website: www.reginaldbibby.com

UPDATE

...Even though the global demographics are clear

- ✓ This is a highly contagious virus – there will be lots of cases
- ✓ Is lethal for the fragile – notably those with comorbidities, esp. 70 & over
- ✓ Most others recover – without severe effects

● **The KEY POLICY IMPLICATION: protect the fragile**

The COVID-19 Situation: Illustrative Countries Through May 7, 2021

	Cases Per 1,000 Pop	Recoveries %	Deaths %	Active %	Severe* % N
1. Canada	20.2	86	2	12	.6 108,585
2. Brazil	100.5	79	2	19	.1 9,240
3. Italy	70.6	90	3	7	.8 8,318
4. Britain	67.8	87	3	10	.6 2,253
5. Russia	65.0	96	3	1	.3 163
6. Mexico	33.3	92	2	6	.9 2,300
7. India	18.2	80	9	11	1.8 4,798
8. Philippines	15.7	82	1	17	.2 8,944
9. Japan	9.8	92	2	6	2.1 750
10. Nigeria	4.9	88	2	10	1.6 1,192
11. China	.8	94	1	5	.1 11
12. China	<.1	95	5	<.1	.3 1

*% of active cases in intensive care or equivalent.

Sources: Worldometer, Calculations and table by Dr. Reginald W. Bibby
Professor, Department of Sociology & Research Affiliate, Prentice Institute for Global
Population & Economy, University of Lethbridge - www.reginaldbibby.com

7) The International Legal Community – Dr. Reiner Fuellmich L.L.M.

COVID-19 is not a Health Issue, its a Power Transition...

According to Fuellmich, Covid-19 scandal has never been a health issue.

Dr. Fuellmich on February 15, 2020:

"The hearings of hundreds of scientists, doctors, economists and lawyers of international renown, among others, conducted by the Berlin Commission of Inquiry into the Covid-19 affair since October 7, 2020, have now shown with a probability approaching 100% certainty that the Covid -19 scandal was never a health issue. "

"Rather, it was a matter of strengthening power, illegally obtained by criminal methods of the corrupt Davos cabal, by transferring the wealth of the population to the members of Davos over the backs of the small, among others. and especially medium-sized companies. "

Dr. Reiner Fuellmich LLM.

He's already taken on Deutsche Bank for financial crimes and Volkswagen for fuel emissions fraud, now consumer protection trial lawyer, Dr. Reiner Fuellmich is preparing to take on the W.H.O and the Pharma criminals in the world's most historic ever, global class action lawsuit. He means business. In the video you will see behind Dr. Fuellmich on a shelf, a copy of "Gunning for Justice" by Gerry Spence --a trial lawyer who never lost a criminal case in the over 50 years he practiced law. You can take that as a hint.

LAWYERS TO SUE WHO FOR 'MISLEADING WORLD OVER COVID-19 OUTBREAK'

In a video released to his YouTube channel, Fuellmich accuses WHO Director Tedros Adhanom, Dr Christan Drosten, the head of virology at Berlin's Charité Hospital, and Dr Lothar Wieler, the head of the RKI, the German counterpart of the U.S. Center for Disease Control, whom he claims knowingly misled governments across the world.

"This corona crisis, according to all we know today, must be renamed a corona scandal, and those responsible for it must be criminally prosecuted, and sued for civil damages," he said. "On a political level, everything must be done to make sure that no one will ever again, be in a position of such power as to be able to defraud humanity, or to attempt to manipulate us with their corrupt agendas."

REINER FUELLMICH - WE'RE ABOUT TO REACH THE TIPPING POINT

A few months ago, Reiner Fuellmich told me about his plans to take the WHO (and other players) to court for "crimes against humanity". He is one of the most powerful lawyers in Europe, and is currently preparing the largest class action lawsuit in history, otherwise known as "Nuremberg 2.0".

Reiner joined me last night for an update on how things are going. Here's the takeaway.

- We're in an invisible war for our sovereignty.
- Lockdowns, masks, social distancing, etc, have nothing to do with a virus.
- COVID-19 - if it even exists - is as mild as flu.
- Flawed PCR tests are the foundation of this fake pandemic.

- The vaccine should be avoided.
- Stop complying as much as possible.
- Tell others to stop complying as much as possible.
- Ignore the mainstream media.
- Don't give up.
- Reiner is an amazing man.
- He will be remembered - for all the right reasons - in history books in the future.

FIGHTING THE WHO!!!

DR REINER FUELLMICH BEGINS LEGAL LITIGATION ON THE COVID-19 FRAUD- THE GREATEST CRIME AGAINST HUMANITY.

The following RED links are live, provided so that you may drill down further.

Evolve to Ecology / February 27, 20212021, 5G, Autism, bat CoV, Bill Gates, biological warfare, BioNtech, BNT162b, Brainwashing, capitalism, CentralBank, china, CO2, Compassion, Consciousness, Consciousness, Coronavirus, Corpocracy, Corporatization, corruption, COVID 19 Vaccine, COVID-9, Cyberwarfare, DankKlausSchwab, depression, disposable masks, DNA, Dr Fauci, Dr Wodarg, Dr. Garth Nicolson, Dr. Yeadon, Earth, ecological illiteracy, Education, Election 2020, Empathy, Environmental Conservation, Environmental Education, environmentalaw, environmentalwaste, Exploitation, freespeech, Freedom, Gaia, Geopolitics, Google, greed, grief, H1N1, Happiness, Health, Hope, HumanRights, immunereaction, Imperialism, Inflammation, Ivermectin, Law, MindControl, mRNA, Mycoplasma, Oxygen, PCRtest, Pfizer, Pharmaceutical, Plutocracy, Political, politics, pollution, polyethyleneglycol, polypropylene, Prism, Privacy, Psychology, Reiner Fuellmich, Robert F. Kennedy Jr, RuleofLaw, Science, SimonDolan, suicide, surveillance, Technocracy, Terrorism, Tracking and Tracing, transhumanism, Ultra Vires, vaccine damage, Vaccine Injury, Vaccine Safety, Vaccine Technology

WHAT'S HAPPENING IN CANADA? STATEMENT OF CLAIM – FILED JANUARY 11, 2021

THE DEFENDANTS

POPE FRANCIS, THE HOLY SEE, THE STATE OF THE VATICAN, THE SOCIETY OF JESUS, HM QUEEN ELIZABETH II, THE ORDER OF THE GARTER, THE HOUSE OF WINDSOR (FORMERLY SAXE COBOURG GOTHA), GLOBAL VACCINE ALLIANCE (GAVI), the UN's WORLD HEALTH ORGANIZATION/PUBLIC HEALTH ORGANIZATION OF CANADA, BILL AND MELINDA GATES FOUNDATION, PRIME MINISTER JUSTIN TRUDEAU, DR. THERESA TAM, PREMIER DOUG FORD, CHRISTINE ELLIOTT, MAYOR JIM WATSON, ATTORNEY GENERAL OF CANADA, THE ATTORNEY GENERAL FOR ONTARIO

8) PLANDEMIC: INDOCTORNATION

COVID 19 – PLANNED. Industrialized plandemic. Chimeric research and execution. CDC patent. (registered) means/ motive/monetary gain. SAARS – was manufactured.

9) 640 MEDICAL DOCTORS BELIEVE COVID 19 IS A GLOBAL SCAM. IT'S A NOMINAL SEASONAL FLU.10) EXCLUSIVE: FORMER PFIZER VP TO AFLDS: 'ENTIRELY POSSIBLE THIS WILL BE USED FOR MASSIVE-SCALE DEPOPULATION'

AMERICA FRONT LINE WORKERS

America's Frontline Doctors (AFLDS) spoke to former Pfizer Vice President and Chief Science Officer **Dr. Mike Yeadon** about his views on the COVID-19 vaccine, hydroxychloroquine and ivermectin, the regulatory authorities, and more.

Dr. Yeadon said "I'm well aware of the global crimes against humanity being perpetrated against a large proportion of the worlds population.

"I feel great fear, but I'm not deterred from giving expert testimony to multiple groups of able lawyers like Rocco Galati in Canada and **Reiner Fuellmich** in Germany.

"I have absolutely no doubt that we are in the presence of evil (not a determination I've ever made before in a 40-year research career) and dangerous products.

11) FORMER CHIEF SCIENCE OFFICER AT PFIZER SAYS HE FEARS "MASSIVE DEPOPULATION" THROUGH MASS 'VACCINATIONS'. (this article is much more detailed than the previous)12) GLOBAL DOCTORS UNIT TO TELL THE TRUTH13) THE AWAKENING CHANNEL14) NO MORE LOCKDOWNS

Lieutenant Colonel David Redman, former head of Emergency Management Alberta, joined the "End the Lockdown Caucus" meeting yesterday to give his professional perspective on how Canada responded to #COVID19. In the presentation, he rips apart how we responded and demonstrated that our response has led to many needless deaths.

We must end the lockdowns, remove our masks, and heed the insights of professionals like Lieutenant Colonel David Redman. Thank you Liberty Coalition Canada for hosting him!

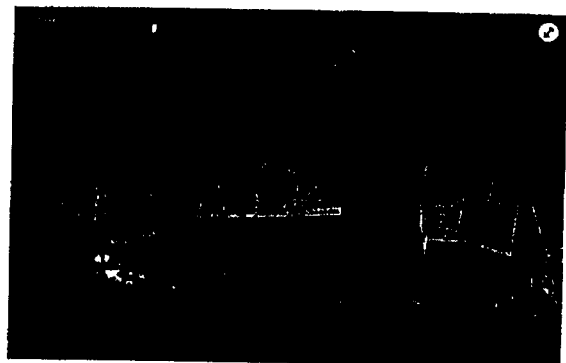
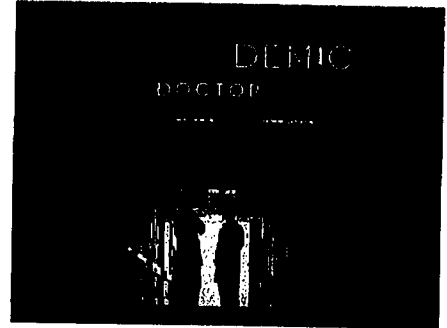
SEE FULL PRESENTATION [HERE](#)

15) STATEMENT ON VIRUS ISOLATION (SOVI) – DR. ANDREW KAUFMAN MD

Isolation: The action of isolating; the fact or condition of being isolated or standing alone; separation from other things or persons; solitariness.

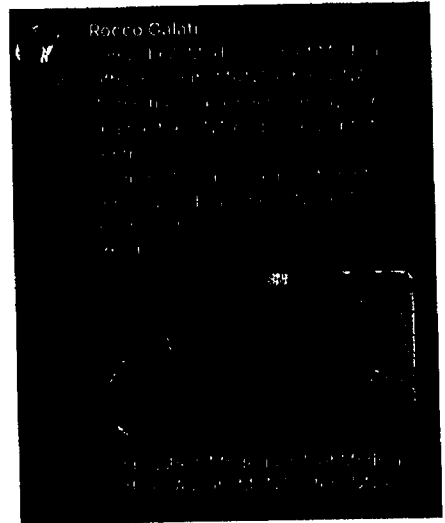
Oxford English Dictionary

The controversy over whether the SARS-CoV-2 virus has ever been isolated or purified continues. However, using the above definition,



common sense, the laws of logic and the dictates of science, any unbiased person must come to the conclusion that the SARS-CoV-2 virus has never been isolated or purified. As a result, no confirmation of the virus' existence can be found. The logical, common sense, and scientific consequences of this fact are:

- the structure and composition of something not shown to exist can't be known, including the presence, structure, and function of any hypothetical spike or other proteins;
- the genetic sequence of something that has never been found can't be known;
- "variants" of something that hasn't been shown to exist can't be known;
- it's impossible to demonstrate that SARS-CoV-2 causes a disease called Covid-19.



- 16) DR. VERNON COLEMAN – DO NOT TAKE THE VACCINE.
- 17) WHY VACCINE PASSPORTS EQUAL SLAVERY FOREVER. NAOMI WOLF: CEO OF DAILY CLOUD.
- 18) CANADIAN COVID 19 TRAVEL PASSPORT - PETITION TO THE GOVERNMENT OF CANADA.
- 19) CDC Admits to Inflating COVID Death Count – startling facts!
- 20) The International Common Law Court: Genocide in Canada
- 21) 4 PART DOCUMENTARY GLOBAL WARNING
 Part 1 at <https://youtu.be/mG-m0zePP84> (taken down by Youtube)
 Part 2 <https://youtu.be/EbHcawXfMbA> (url works)
 Part 3 <https://youtu.be/lhqt3aYMeK> (taken down by Youtube)
 Part 4 <https://youtu.be/UFGqKckB7nQ> (taken down by Youtube)
 YouTube Version if it uploads <https://youtu.be/G0PzJ1b12xl> (taken down by Youtube)
 On Rumble, you can view it at <https://rumble.com/vedaj1-global-warning.html>.
 UTROCK: "Upon this rock I will build my church and the gates of hell will not prevail against it." Matthew 16:18 www.globalwarning.ca (url works)
- 22) THIS IS WHAT THEY'RE NOT TELLING YOU ABOUT THE VACCINE
- 23) DISINFORMATION DOZEN.
 Power group of Truth Superheroes aligned in one purpose.
- 24) TRUTH WEEK.

Dr. Christiane Northrup: #TruthWeek – Seven Days of Truth About COVID-19 Crimes Against Humanity, Collective Intelligence, Cultural Intelligence

- 25) Dr. Sherri Tenpenny Interviews Christopher James - Part 1 (March 8, 2021)
- 26) Medical Doctor Exposes Mass Eugenics Extermination Called 'Covid-19 Vaccine'
- 27) A Nurse Shares Her Thoughts & Concerns: mRNA Vaccines.
- 28) Texas Doctor Exposes Dangers of COVID-19 Vaccine: The Truth is ... it's Gene Therapy
- 29) Stop World Control: Fact Checked. Medical Doctors Speak Out

Dr. Simone Gold Explains
The Crime Of Covid Vaccines

Dr. Simone Gold is the founder of Americas Frontline Doctors where leading medical experts speak out against the rampant misinformation campaign by the government

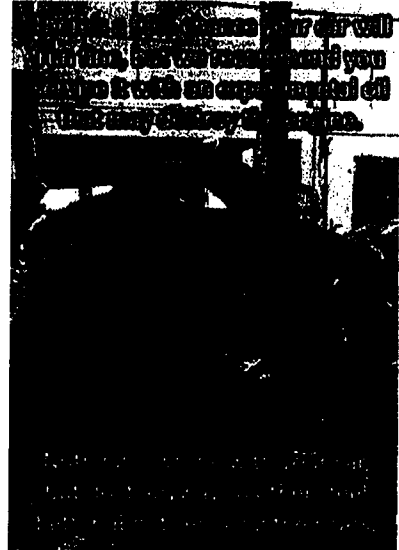
and mainstream media. Their White Coat Summits were viewed twenty million times, when Big Tech (Facebook, Youtube, Twitter, ...) censored them, in an attempt to suppress real medical information. In the following presentation Dr. Simone Gold explains what is going on with the vaccine.

30) BILL GATES – VACCINES ARE A 20 - 1 RETURN ON INVESTMENT
Bill Gates: My 'best investment' turned \$10 billion into \$200
billion worth of economic benefit.

31) Bombshell: Moderna Chief Medical Officer Admits MRNA
Alters DNA. "Hacking the software of life"

32) 3,964 Dead 162,610 Injuries: European Database of Adverse
Drug Reactions for COVID-19 "Vaccines". Their report
 through March 13, 2021 lists 3,964 deaths and 162,610 injuries
 following injections of three experimental COVID-19 shots:

COVID-19 MRNA VACCINE MODERNA (CX-024414), COVID-
19 MRNA VACCINE PFIZER-BIONTECH (TOZINAMERAN),
and COVID-19 VACCINE ASTRAZENECA (CHADOX1 NCOV-
19).



There is also data for a fourth experimental COVID "vaccine," COVID-19 VACCINE
JANSSEN (AD26.COV2.S). We have not included data from the Johnson and Johnson
 COVID shot in this report, but will do so in future reports. 460 Dead 243,612 Reported
Injuries from COVID-19 Vaccines Reported in the U.K.

Their report through March 13, 2021 lists 3,964 deaths and 162,610 injuries following
 injections of three experimental COVID-19 shots:

COVID-19 MRNA VACCINE MODERNA (CX-024414), COVID-19 MRNA VACCINE PFIZER-
BIONTECH (TOZINAMERAN), and COVID-19 VACCINE ASTRAZENECA (CHADOX1 NCOV-
19).

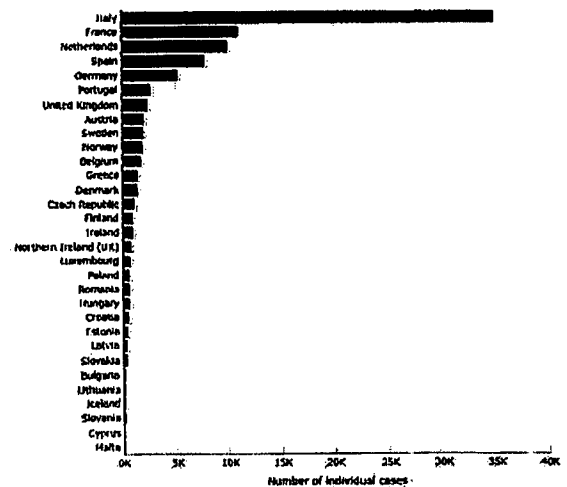
There is also data for a fourth experimental COVID "vaccine," COVID-19 VACCINE
JANSSEN (AD26.COV2.S). We have not included data from the Johnson and Johnson
 COVID shot in this report, but will do so in future reports. 460 Dead 243,612 Reported
Injuries from COVID-19 Vaccines Reported in the U.K.

A *Health Impact News* subscriber in Europe ran the reports for each of the three COVID-
 19 shots we are including here, and here is the summary data through March 13, 2021.

Total reactions for the experimental mRNA
 vaccine Tozinameran (code BNT162b2, Comirnaty)
 from BioNTech/Pfizer: 2,540 deaths and 102,100 injuries to 13/03/2021

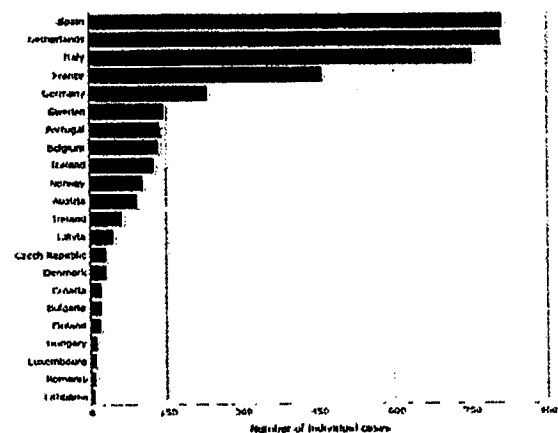
COVID-19 MRNA VACCINE PFIZER-BIONTECH (TOZINAMERAN)

- 7,604 Blood and lymphatic system disorders incl. **15 deaths**
- 4,636 Cardiac disorders incl. **276 deaths**
- 22 Congenital, familial and genetic disorders incl. **2 deaths**
- 2,683 Ear and labyrinth disorders
- 52 Endocrine disorders
- 2,941 Eye disorders incl. **2 deaths**
- 23,074 Gastrointestinal disorders incl. **125 deaths**
- 72,072 General disorders and administration site conditions incl. **957 deaths**
- 102 Hepatobiliary disorders incl. **12 deaths**
- 1,928 Immune system disorders incl. **11 deaths**
- 6,020 Infections and infestations incl. **275 deaths**
- 2,198 Injury, poisoning and procedural complications incl. **32 deaths**
- 4,565 Investigations incl. **111 deaths**
- 1,567 Metabolism and nutrition disorders incl. **49 deaths**
- 37,365 Musculoskeletal and connective tissue disorders incl. **22 deaths**
- 55 Neoplasms benign, malignant and unspecified (incl cysts and polyps) incl. **3 deaths**
- 44,993 Nervous system disorders incl. **185 deaths**
- 81 Pregnancy, puerperium and perinatal conditions incl. **2 deaths**
- 57 Product issues
- 3,742 Psychiatric disorders incl. **28 deaths**
- 525 Renal and urinary disorders incl. **37 deaths**
- 545 Reproductive system and breast disorders
- 8,788 Respiratory, thoracic and mediastinal disorders incl. **294 deaths**
- 10,808 Skin and subcutaneous tissue disorders incl. **18 deaths**
- 229 Social circumstances incl. **6 deaths**
- 69 Surgical and medical procedures incl. **4 deaths**
- 4,820 Vascular disorders incl. **74 deaths**



Total reactions for the experimental mRNA vaccine mRNA-1273 (CX-024414) from Moderna: **973 deaths** and 5,939 injuries to 13/03/2021

- 33) Exclusive: Former Pfizer VP to AFDS: 'Entirely possible this will be used for massive-scale depopulation'
- 34) Florida Legislature: DeSantis targets vaccine passports, signs coronavirus liability bill
- 35) COVID shots Explained by Dr Tenpenny. This is an EXPERIMENTAL VACCINE.
- 36) Questions to consider
 - a. If the vaccine is an experimental vaccine, will your health insurance company cover you?
 - b. If the vaccine is an experimental vaccine, will your life insurance company cover you?



Clark County School District Affidavit of Maladministration

**Petition with Notice
[Affidavit of Maladministration]
Legal Notice and Warning
Notice to Change of Contract Terms**

**FROM: Bonnie Taylor
2161 Madison Heights Street
Henderson NV 89052**

TO:

**Superintendent of Clark County School District
Dr. Jesus F. Jara
510 West Sahara Ave.
Las Vegas, NV 89146**

**County Health Officer
Dr. Fermin Leguen
280 S Decatur Blvd
Las Vegas, NV 89107**

School Board Trustees (all) of Clark County School District

**Linda P. Cavazos
Irene A. Cepeda
Evelyn Garcia Morales
Lola Brooks**

**Danielle Ford
Lisa Guzman
Katie Williams**

Nevada Board of Education

**Felicia Ortiz
Mark Newburn
Dr. Rene Cantu
Katie Coombs
Tim Hughes**

**Dr. Katherine Dockweiler
Mike Walker
Wayne Workman
Cathy McAdoo
Alex Gallegos**

**CC: Attorney General Aaron Ford
100 N. Carson Street
Carson City, NV 89701**

**CC: Governors Steve Sisolak
Grant Sawyer State Office Building
555 East Washington Ave., Suite 5100
Las Vegas, NV 89101**

**CC: Joe Lombardo County Sheriff
400 S. Martin L. King Blvd.
Las Vegas, NV 89106**

Clark County School District Affidavit of Maladministration

Notice to Agent is Notice to Principal and Notice to Principal is Notice to Agent

Comes now Affiant Bonnie Taylor, one of the People (as seen in the Nevada Constitution Bill of Rights Article 1, Section 1), Sul Juris, in this Court of Record, brings the following claims and facts that you and your agents, serving as elected servants and trustees of the People, must provide due care and remember your oath which binds you:

Nevada Constitution Article 15 Section 2: "Oath of office"

"Members of the legislature, and all officers, executive, judicial and ministerial, shall, before they enter upon the duties of their respective offices, take and subscribe to the following oath: I, _____, do solemnly swear (or affirm) that I will support, protect and defend the constitution and government of the United States, and the constitution and government of the State of Nevada, against all enemies, whether domestic or foreign, and that I will bear true faith, allegiance and loyalty to the same, any ordinance, resolution or law of any state notwithstanding, and that I will well and faithfully perform all the duties of the office of _____, on which I am about to enter; (if an oath) so help me God; (if an affirmation) under the pains and penalties of perjury".

Equality and Rights of Men

Clark County School Board Trustees, The Nevada Board of Education and the Governor are not allowing the students, staff, teachers and volunteers to live freely by requiring masks, social distancing and vaccines. **See Reference below:**

Nevada Constitution, Article 1 Section 1. Inalienable rights.

"All men are by Nature free and equal and have certain inalienable rights among which are those of enjoying and defending life and liberty; Acquiring, Possessing and Protecting property and pursuing and obtaining safety and happiness."

People are the Source of Power

Clark County School Board Trustees, the Nevada Board of Education and the Governor work for We The People. All political power is inherent in The People. Affiant comes as one of the People from which your power is derived. Your oath affirms that your main purpose is to protect and maintain my individual rights. This includes the rights of my heritage, those in my care, my children. Affidavit is being given as notice to those that are creating or enforcing rules and mandates such as social distancing, mask wearing or vaccines. You are infringing on the freedoms guaranteed to the People. You are also practicing health discrimination and segregation and are depriving People of their rights under color of law. **See Reference below:**

Clark County School District Affidavit of Maladministration

Nevada Constitution Article 1 Section 2: "Purpose of government; paramount allegiance to United States"

"All political power is inherent in the people. Government is instituted for the protection, security and benefit of the People; and they have the right to alter or reform the same whenever the public good may require it."

US Constitution (Supreme Law of the Land) Amendment 14 Section 1.

"All persons born or naturalized in the United States, and subject to the jurisdiction thereof, are citizens of the United States and of the state wherein they reside. No state shall make or enforce any law which shall abridge the privileges or immunities of citizens of the United States; nor shall any state deprive any person of life, liberty, or property, without due process of law; nor deny to any person within its jurisdiction the equal protection of the laws."

Government Instituted for the Common Benefit and The People to Instruct their Representatives

Furthermore, Nevada Constitution Article 1, Section 4, The liberty of conscience hereby secured, shall not be construed, as to excuse acts of licentiousness or justify practices inconsistent with the peace or safety of this State. Article 1, Section 10, The people shall have the right freely to assemble to consult for the common good, to instruct their representatives and to petition the Legislature for redress of Grievances.

You as state personnel, are subject to having your actions restricted if your actions are not consistent with protecting the People's freedom. Any failure on your part to protect these rights is a breach of your trust indenture, granted by the People, and will be considered an act of maladministration, and an attack on the People you serve.

A system of vaccination and/or masking has been created and the People are being threatened to participate or lose the freedoms guaranteed to us and our children. Affiant affirms that any rebates, intimidation, manipulation or grooming of children to participate in activities regarding a minor's health, including staying away from friends, obstruction of airway due to mask wearing, staying at home for prolonged periods, or vaccination without full disclosure of risks and written, signed consent of the parents are unlawful. The men and women creating and adopting any such policies shall be fully liable to the extent of the law for every health concern arising out of the above-mentioned violations of rights and 'mandated' health care policies.

Affiant demands that the School Board cease and desist immediately from any policies that mandate forced mask wearing, social distancing, and/or experimental vaccination and/or

Clark County School District Affidavit of Maladministration

proof as condition for free and equal participation in education, or as a means to discriminate against or segregate children.

Vaccine companies are exempt from any and all liability that may arise from vaccine injury or death, but men and women who coerce or convince or administer vaccines, are not shielded from such liability. Emergency Use Authorization (EUA) for experimental vaccines, such as every single COVID-19 vaccine, are exempt from liability according to the National Childhood Vaccine Injury Act (NCVIA) and the National Vaccine Injury Compensation Program (NVICP). This was the impetus from the creation of the 2005 PREP Act. The PREP Act notes certain "covered individuals"; healthcare practitioners who administer the vaccines for example. However, I find nothing in the PREP Act that would make immune school districts, schools, or their trustees and boards, employers, businesses, sports teams, or county commissioners and other politicians.

If you believe you have the power granted to you by the Nevada Constitution to ignore these demands, please reply within 5 calendar days with the Constitutional provisions that gives you such authority. If you fail to respond with the Constitutional provisions giving you the authority to refuse the will of the People, you agree by acquiescence that you are doing acts which conflict with this notice with malice, and are knowingly and willfully ignoring the trust indenture you swore to uphold.

Legal Notice and Warning

Federal law provides that it is a crime to violate the Constitutional Rights of a citizen under the Color of Law. You can be arrested for this crime and you can also be held personally liable for civil damages. Attempting to coerce or deceive a citizen to surrender their Constitutional Rights is a Federal Crime. Federal Courts have found that your ignorance of the law is no excuse.

18 USC §242 provides that Whoever, under color of any law, statute, ordinance, regulation, or custom, willfully subjects any person in any State, Territory, Commonwealth, Possession, or District to the deprivation of any rights, privileges, or immunities secured or protected by the Constitution or laws of the United States... shall be fined under this title or imprisoned not more than ten years, or both; and if death results from the acts committed in violation of this section or if such acts include kidnapping or an attempt to kidnap, aggravated sexual abuse, or an attempt to commit aggravated sexual abuse, or an attempt to kill, shall be fined under this title, or imprisoned for any term of years or for life, or both, or may be sentenced to death.

18 USC 245 provided that Whoever, whether or not acting under color of law, intimidates or interferes with, participating in or enjoying any benefit, service, privilege, program, facility, or activity provided or administered by the United States; applying for or enjoying employment, or any perquisite thereof, by any agency of the United States; shall be fined under this title, or imprisoned not more than ten years, or both; and if death results from the acts committed in

Clark County School District Affidavit of Maladministration

violation of this section or if such acts include kidnapping or an attempt to kidnap, aggravated sexual abuse or an attempt to commit aggravated sexual abuse, or an attempt to kill, shall be fined under this title or imprisoned for any term of years or for life, or both, or may be sentenced to death.

42 USC §1983 provides that every person who, under color of any statute, ordinance, regulation, custom, or usage, of any State or Territory or the District of Columbia, subjects, or causes to be subjected, any citizen of the United States or other person within the jurisdiction thereof to the deprivation of any rights, privileges, or immunities secured by the Constitution and laws, shall be liable to the party injured in an action at law, suit inequity, or other proper proceeding for redress.

Encouraging vaccination by providing for and allowing any temporary vaccine facility on a school campus, which implies to the People that such a health care choice and experiment is encouraged by the school, is a conflict of interest of the school, or an incentive and manipulation designed to obtain more federal funds (see Title 18 USC 1038/1040). Many vaccination facilities exist with ease of access for families. There is no reason to set up vaccination clinics in or around areas with children who are unaccompanied by their parents.

WARNING: you may be in violation of Federal Law and persisting with your behavior may lead to your arrest and/or civil damages. Also understand that the law provides that you can be held personally responsible and liable, as well as your company or agency. You are advised to cease and desist with your policies and to seek personal legal counsel if you do not understand the law.

Please take further notice that the only reason that the People have power to bring forth a petition is because the government is created to carry out the People's will and when government is functioning in a way that goes against the People's will and authority, the People are to correct the government's behavior and lead them in ways consistent with the Constitution and demand a redress of grievances.

It is therefore hereby the will of Affiant, Order and Demand that this school board policies cease and desist from the following unconstitutional policies and behaviors that infringe on individual rights:

1. Any and all forced mask wearing policies and rules
2. Covid 19 vaccination requirements Incentives or coercion
3. Social distancing rules
4. Holding school board meetings by zoom or in restricted conditions limiting our ability to request a redress of grievances utilizing the excuse of 'emergency'
5. Segregation and discrimination of children based on health care choice
6. Forbidding or restricting any man, woman or child free access to public spaces due to unconstitutional policies citing 'health'

Clark County School District Affidavit of Maladministration

7. Manipulation of children through pressure to follow health recommendations which may conflict with religious belief, parental preference or medical conditions
8. Criminal coercion of any man, woman or child to participate in medical experiments through threat of violating privacy, public shaming, forcing documented proof of vaccination, withholding services from any of the People for noncompliance
9. Forcing children with disability to be sequestered at home for not following arbitrary and unconstitutional health care rules
10. Allowing vaccination clinics on or around school grounds where unaccompanied children are present

This affidavit is a Contract, and if you shall ignore this Affidavit by not responding by the following terms, you agree to pay \$1000 per day until our complaints have been resolved. If you, as an elected government official believe that these claims are untrue, please respond within 5 days with Constitutional Provisions, sworn under penalty of perjury, by Affidavit, point by point, showing where you have Constitutional Authority to ignore these rights of the people. If you do not respond within 5 days, you agree, by acquiescence, that you are knowingly interfering with the rights of one of the People you swore to protect and that this Affidavit shall stand as evidence that you are acting in Maladministration and that no court shall have the power to again adjudicate these matters and that all Courts of Record shall accept this Affidavit as truth and law. You also agree to be bound by all said herein and the Affiant is able to bring this Contract before an Arbitrator of Affiant's choice and you agree to be bound by any reward.

By the power of one of the people, and the power declared in the above constitutional provision, I Bonnie Taylor demand, require and order a complete removal of the mask mandate, vaccine mandate and/or forced treatments or interactions relating to the students, teachers, staff, and volunteers immediately. As seen above, all rights that were set forth in the above section are self-executing, and since you are being given that this is demanded.

Clark County School District Affidavit of Maladministration

VERIFICATION

I hereby declare, certify and state, pursuant to the penalties of perjury under the laws of the United States of America, and by the provisions of 28 USC 1746, that all of the foregoing representations are true and correct to the best of my knowledge, information and belief.

Executed in Henderson, Nevada, on this 10th day of August in the Year of our Lord Two thousand and Twenty One.

Autograph of Affiant: Bonnie Taylor

Notary as JURAT CERTIFICATE

Nevada State }

Clark County }

On this 10 day of August, 2021 (date) before me,

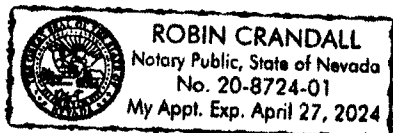
Robin Crandall, a Notary Public, personally appeared

Bonnie Taylor Name of Affiant, who proved to me on the basis of satisfactory evidence to be the man/woman whose name is subscribed to the within Instrument and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her autograph(s) on the instrument the man/woman executed this instrument.

I certify under PENALTY of PERJURY under the lawful laws of Nevada State that the foregoing paragraph is true and correct.

WITNESS my hand and official seal. Signature of Notary / Jurat

Seal:



37) Your Rights to Decline Mandatory COVID Vaccines: Rocco Galatti (expressed/informed consent)

38) Masks Are a Ticking Time Bomb. Dr. Joseph Mercola
STORY AT-A-GLANCE

It's estimated that 129 billion face masks are used worldwide each month, which works out to about 3 million masks a minute. Not only are masks not being recycled, but their materials make them likely to persist and accumulate in the environment. Because masks may be directly made from micro-sized plastic fibers with a thickness of 1 mm to 10 mm, they may release micro-sized particles into the environment more readily — and faster — than larger plastic items, like plastic bags. Microbes from your mouth, known as oral commensals, frequently enter your lungs, where they've been linked to advanced stage lung cancer; wearing a mask could potentially accelerate this process.

39) FAUCI: DECREASE IN COVID-19 CASES IN TEXAS 'CONFUSING'

40) THE CRIMINAL CODE OF CANADA

41) 18 Reasons I Won't Be Getting a Covid Vaccine: Christian Elliot (this whole section is a "cut & paste" of the article)

A few friends have asked my thoughts on the covid jab(s) so I thought it was time to write an article on the topic. All my friends had not heard most of the details I shared, so I figured you might appreciate hearing some of what I told them. Knowing how contentious this issue is, part of me would rather just write about something else, but I feel like the discussion/news is so one-sided that I should speak up. As I always strive to do, I promise to do my best to be level-headed and non-hysterical. I'm not here to pick a fight with anyone, just to walk you through some of what I've read, my lingering questions, and explain why I can't make sense of these covid vaccines.

THREE GROUND RULES FOR DISCUSSION

If you care to engage on this topic with me, excellent.

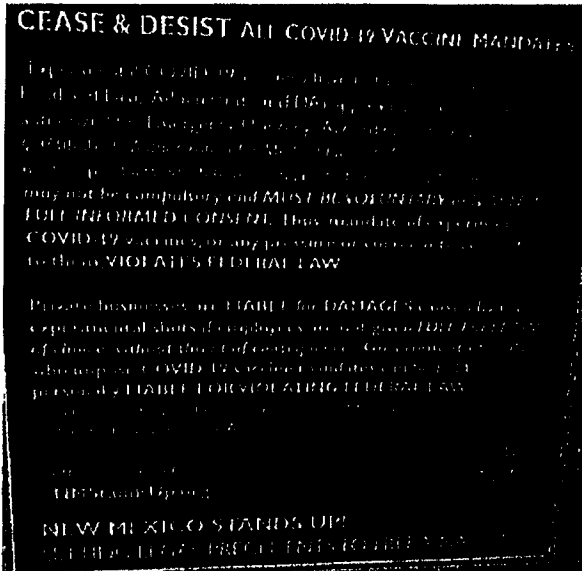
Here are the rules...

I am more than happy to correspond with you if...

1. You are respectful and treat me the way you would want to be treated.
2. You ask genuinely thoughtful questions about what makes sense to you.
3. You make your points using sound logic and don't hide behind links or the word "science."

If you do respond, and you break any of those rules, your comments will be ignored/deleted.

With that out of the way, let me say this...



I don't know everything, but so far no one has been able to answer the objections below.

So here are the reasons I'm opting out of the covid vaccine.

#1: VACCINE MAKERS ARE IMMUNE FROM LIABILITY

The only industry in the world that bears no liability for injuries or deaths resulting from their products, are vaccine makers. First established in 1986 with the National Childhood Vaccine Injury Act, and reinforced by the PREP Act, vaccine makers cannot be sued, even if they are shown to be negligent. The covid-vaccine makers are allowed to create a one-size-fits-all product, with no testing on sub-populations (i.e. people with specific health conditions), and yet they are unwilling to accept any responsibility for any adverse events or deaths their products cause. If a company is not willing to stand behind their product as safe, especially one they rushed to market and skipped animal trials on, I am not willing to take a chance on their product. No liability. No trust.

Here's why...

#2: THE CHECKERED PAST OF THE VACCINE COMPANIES

The four major companies who are making these covid vaccines are/have either:

1. Never brought a vaccine to market before covid (Moderna and Johnson & Johnson).
2. Are serial felons (Pfizer, and Astra Zeneca).
3. Are both (Johnson & Johnson).

Moderna had been trying to "Modernize our RNA" (thus the company name)—for years, but had never successfully brought ANY product to market—how nice for them to get a major cash infusion from the government to keep trying. In fact, all major vaccine makers (save Moderna) have paid out tens of billions of dollars in damages for other products they brought to market when then knew those product would cause injuries and death—see Vioxx, Bextra, Celebrex, Thalidomide, and Opioids as a few examples.

If drug companies willfully choose to put harmful products in the market, when they can be sued, why would we trust any product where they have NO liability? In case it hasn't sunk in, let me reiterate...3 of the 4 covid vaccine makers have been sued for products they brought to market even though they knew injuries and deaths would result.

- Johnson & Johnson has lost major lawsuits in 1995, 1996, 2001, 2010, 2011, 2016, 2019 (For what it's worth, J&J's vaccine also contains tissues from aborted fetal cells, perhaps a topic for another discussion)
- Pfizer has the distinction of the biggest criminal payout in history. They have lost so many lawsuits it's hard to count. You can check out their rap sheet here. Maybe that's why they are demanding that countries where they don't have liability protection put up collateral to cover vaccine-injury lawsuits.

- **Astra Zeneca** has similarly lost so many lawsuits it's hard to count. Here's one. Here's another...you get the point. And in case you missed it, the company had their covid vaccine suspended in at least 18 countries over concerns of blood clots, and they completely botched their meeting with the FDA with numbers from their study that didn't match.
- Oh, and apparently **J&J** (whose vaccine is approved for "Emergency Use" in the US) and **Astrazenca** (whose vaccine is not approved for "Emergency Use" in the US), had a little mix up in their ingredients...in 15 million doses. Oops.

Let me reiterate this point:

Given the free pass from liability, and the checkered past of these companies, why would we assume that all their vaccines are safe and made completely above board? Where else in life would we trust someone with that kind of reputation? To me that makes as much sense as expecting a remorseless, abusive, unfaithful lover to become a different person because a judge said deep down they are a good person.

No. I don't trust them. No liability. No trust. Here's another reason why I don't trust them.

#3: THE UGLY HISTORY OF ATTEMPTS TO MAKE CORONAVIRUS VACCINES

There have been many attempts to make viral vaccines in the past that ended in utter failure, which is why we did not have a coronavirus vaccine in 2020. In the 1960's, scientists attempted to make an RSV (Respiratory Syncytial Virus) vaccine for infants.

In that study, they skipped animal trials because they weren't necessary back then.

In the end, the vaccinated infants got much sicker than the unvaccinated infants when exposed to the virus in nature, with 80% of the vaccinated infants requiring hospitalization, and two of them died.

After 2000, scientists made many attempts to create coronavirus vaccines.

For the past 20 years, all ended in failure because the animals in the clinical trials got very sick and many died, just like the children in the 1960's.

You can read a summary of this history/science here.

Or if you want to read the individual studies you can check out these links:

- In 2004 attempted vaccine produced hepatitis in ferrets
- In 2005 mice and civets we're became sick and more susceptible to coronaviruses after being vaccinated
- In 2012 the ferrets became sick and died. And in this study mice and ferrets developed lung disease.
- In 2016 this study also produce lung disease in mice.

The typical pattern in the studies mentioned above is that the children and the animals produced beautiful antibody responses after being vaccinated.

The manufacturers thought they hit the jackpot.

The problem came when the children and animals were exposed to the wild version of the virus.

When that happened, an unexplained phenomenon called Antibody Dependent Enhancement (ADE) also known as Vaccine Enhanced Disease (VED) occurred where the immune system produced a "cytokine storm" (i.e. overwhelmingly attacked the body), and the children/animals died.

Here's the lingering issue...

The vaccine makers have no data to suggest their rushed vaccines have overcome that problem.

In other words, never before has any attempt to make a coronavirus vaccine been successful, nor has the gene-therapy technology that is mRNA "vaccines" been safely brought to market, but hey, since they had billions of dollars in government funding, I'm sure they figured that out.

Except they don't know if they have...

#4: THE "DATA GAPS" SUBMITTED TO THE FDA BY THE VACCINE MAKERS

When vaccine makers submitted their papers to the FDA for the Emergency Use Authorization (Note: An EUA is *not* the same as a full FDA approval), among the many "Data Gaps" they reported was that they have nothing in their trials to suggest they overcame that pesky problem of Vaccine Enhanced Disease.

They simply don't know--i.e. they have no idea if the vaccines they've made will also produce the same cytokine storm (and deaths) as previous attempts at such products.

As Joseph Mercola points out...

"Previous attempts to develop an mRNA-based drug using lipid nanoparticles failed and had to be abandoned because when the dose was too low, the drug had no effect, and when dosed too high, the drug became too toxic. An obvious question is: What has changed that now makes this technology safe enough for mass use?"

If that's not alarming enough, here are other gaps in the data--i.e. *there is no data to suggest safety or efficacy regarding:*

- Anyone younger than age 18 or older than age 55
- Pregnant or lactating mothers
- Auto-immune conditions
- Immunocompromised individuals
- **No data on *transmission* of covid**
- **No data on *preventing mortality* from covid**
- **No data on *duration of protection* from covid**

Hard to believe right?

In case you think I'm making this up, or want to see the actual documents sent to the FDA by Pfizer and Moderna for their Emergency Use Authorization, you can check out this, or this respectively. The data gaps can be found starting with page 46 and 48 respectively.

For now let's turn our eyes to the raw data the vaccine makers used to submit for emergency use authorization.

#5: NO ACCESS TO THE RAW DATA FROM THE TRIALS

Would you like to see the raw data that produced the "90% and 95% effective" claims touted in the news?

Me too...

But they won't let us see that data.

As pointed out in the BMJ, something about the Pfizer and Moderna efficacy claims smells really funny.

There were "3,410 total cases of suspected, but unconfirmed covid-19 in the overall study population, 1,594 occurred in the vaccine group vs. 1,816 in the placebo group."

Wait...what?

Did they fail to do science in their scientific study by not verifying a major variable?

Could they not test those "suspected but unconfirmed" cases to find out if they had covid? Apparently not. Why not test all 3,410 participants for the sake of accuracy? Can we only guess they didn't test because it would mess up their "90-95% effective" claims? Where's the FDA?

Would it not be prudent for the FDA, to expect (demand) that the vaccine makers test people who have "covid-like symptoms," and release their raw data so outside, third-parties could examine how the manufacturers justified the numbers? I mean it's only every citizen of the world we're trying to get to take these experimental products...

Why did the FDA not require that? Isn't that the entire purpose of the FDA anyway? Good question. Foxes guarding the hen house?

Seems like it.

No liability. No trust.

#6: NO LONG-TERM SAFETY TESTING

Obviously, with products that have only been on the market a few months, we have no long-term safety data. In other words, we have no idea what this product will do in the body months or years from now—for ANY population. Given all the risks above (risks that ALL pharmaceutical products have), would it not be prudent to wait to see if the worst-case scenarios have indeed been avoided? Would it not make sense to want to fill those pesky "data gaps" before we try to give this to every man, woman, and child on the

planet? Well...that would make sense, but to have that data, they need to test it on people, which leads me to my next point...

#7: NO INFORMED CONSENT

What most who are taking the vaccine don't know is that because these products are still in clinical trials, anyone who gets the shot is now part of the clinical trial. They are part of the experiment. Those (like me) who do not take it, are part of the control group.

Time will tell how this experiment works out. But, you may be asking, if the vaccines are causing harm, wouldn't we be seeing that all over the news? Surely the FDA would step in and pause the distribution? Well, if the adverse events reporting system was working, maybe things would be different.

#8: UNDER-REPORTING OF ADVERSE REACTIONS AND DEATH

According to a study done by Harvard (at the commission of our own government), less than 1% of all adverse reactions to vaccines are actually submitted to the National Vaccine Adverse Events Reports System (VAERS) - read page 6 at the link above.

While the problems with VAERS have not been fixed (as you can read about in this letter to the CDC), at the time of this writing VAERS reports over 2,200 deaths from the current covid vaccines, as well as close to 60,000 adverse reactions.

"VAERS data released today showed 50,861 reports of adverse events following COVID vaccines, including 2,249 deaths and 7,726 serious injuries between Dec. 14, 2020 and March 26, 2021." And those numbers don't include (what is currently) 578 cases of Bell's Palsy.

If those numbers are still only 1% of the total adverse reactions (or .8 to 2% of what this study published recently in the JAMA found), you can do the math, but that equates to somewhere around 110,000 to 220,000 deaths from the vaccines to date, and a ridiculous number of adverse reactions. Bet you didn't see that on the news.

That death number would currently still be lower than the 424,000 deaths from medical errors that happen every year (which you probably also don't hear about), but we are not even six months into the rollout of these vaccines yet. If you want a deeper dive into the problems with the VAERS reporting system, you can check this out, or check this out.

But then there's my next point, which could be argued makes these covid vaccines seem pointless...

#9: THE VACCINES DO NOT STOP TRANSMISSION OR INFECTION

Wait, what? Aren't these vaccines supposed to be what we've been waiting for to "go back to normal"? Nope. Why do you think we're getting all these conflicting messages about needing to practice social distancing and wear masks AFTER we get a vaccine?

The reason is because these vaccines were never designed to stop transmission OR infection. If you don't believe me, I refer you again to the papers submitted to the FDA I linked to above. The primary endpoint (what the vaccines are meant to accomplish) is to *lower your symptoms*. Sounds like just about every other drug on the market right?

That's it...lowering your symptoms is the big payoff we've been waiting for.

Does that seem completely pointless to anyone but me?

1. It can't stop us from *spreading* the virus.
2. It can't stop the virus from *infecting* us once we have it.
3. To get the vaccine is to accept all the risk of these experimental products and the best it might do is lower symptoms?

Heck, there are plenty of other things I can do to lower my symptoms that don't involve taking what appears to be a really risky product. Now for the next logical question:

If we're worried about asymptomatic spreaders, would the vaccine not make it more likely that we are creating asymptomatic spread?

If it indeed reduces symptoms, anyone who gets it might not even know they are sick and thus they are more likely to spread the virus, right?

For what it's worth, I've heard many people say the side effects of the vaccine (especially the second dose) are worse than catching covid. I can't make sense of that either. Take the risk. Get no protection. Suffer through the vaccine side-effects. Keep wearing your mask and social distancing... And continue to be able to spread the virus.

What? It gets worse.

#10: PEOPLE ARE CATCHING COVID AFTER BEING FULLY VACCINATED

Talk about a bummer. You get vaccinated and you *still* catch covid.

- It's happening in Washington State
- It's happening in New York
- It's happening in Michigan
- It's happening in Hawaii
- It's happening in several other states too.
- It happened to 80% of 35 nuns who got the vaccine in Kentucky. Two of them died by the way.

In reality, this phenomenon is probably happening everywhere, but those are the ones making the news now. Given the reasons above (and what's below), maybe this doesn't surprise you, but bummer if you thought the vaccine was a shield to keep you safe.

It's not. **That was never the point.**

If 66% of healthcare workers in L.A. are going to delay or skip the vaccine...maybe they aren't wowed by the rushed science either.

Maybe they are watching the shady way deaths and cases are being reported...

#11: THE OVERALL DEATH RATE FROM COVID

According to the CDC's own numbers, covid has a 99.74% survival rate.

Why would I take a risk on a product, that doesn't stop infection or transmission, to help me overcome a cold that has a .26% chance of killing me—actually in my age range is has about a .1% chance of killing me (and .01% chance of killing my kids), but let's not split hairs here. With a bar (death rate) that low, we will be in lockdown every year...i.e. forever. But wait, what about the 500,000 plus deaths, that's alarming right? I'm glad you asked.

#12: THE BLOATED COVID DEATH NUMBERS

Something smells really funny about this one. Never before in the history of death certificates has our own government changed how deaths are reported. Why now, are we reporting everyone who dies *with* covid in their body, as having died of covid, rather than the co-morbidities that actually took their life?

Until covid, all coronaviruses (common colds) were never listed as the *primary* cause of death when someone died of heart disease, cancer, diabetes, auto-immune conditions, or any other major co-morbidity. The *disease* was listed as the cause of death, and a confounding factor like flu or pneumonia was listed on a separate line. To bloat the number even more, both the W.H.O. and the C.D.C. changed their guidelines such that those who are suspected or probable (but were never confirmed) of having died of covid, are also included in the death numbers. Seriously?

If we are going to do that then should we not go back and change the numbers of all past cold and flu seasons so we can compare apples to apples when it comes to death rates?

According to the CDCs own numbers, (scroll down to the section "Comorbidities and other conditions") only 6% of the deaths being attributed to covid are instances where covid seems to be the only issue at hand.

In other words, reduce the death numbers you see on the news by 94% and you have what is likely the real numbers of deaths from just covid.

Even if the former CDC director is correct and covid-19 was a lab-enhanced virus (see Reason #14 below), a .26% death rate is still in line with the viral death rate that circles the planet ever year.

Then there's this Fauci guy. I'd really love to trust him, but besides the fact that he hasn't treated one covid patient...you should probably know...

#13: FAUCI AND SIX OTHERS AT NIAID OWN PATENTS IN THE MODERNA VACCINE

Thanks to the Bayh-Dole Act, government workers are allowed to file patents on any research they do using tax payer funding. Tony Fauci owns over 1,000 patents (see this video for more details), including patents being used on the Moderna vaccine...*which he approved government funding for*. In fact, the NIH (which NIAID is part of) claims joint ownership of Moderna's vaccine.

Does anyone else see this as a MAJOR conflict of interest, or criminal even? I say criminal because there's also this pesky problem that makes me even more distrustful of Fauci, NIAD, and the NIH in general.

#14: FAUCI IS ON THE HOT SEAT FOR ILLEGAL GAIN-OF-FUNCTION RESEARCH

What is "Gain-of-Function" research? It's where scientists attempt to make viruses *gain* functions—i.e. make them more transmissible and deadlier. Sounds at least a touch unethical, right? How could that possibly be helpful? Our government agreed, and banned the practice. So what did the Fauci-led NIAID do?

They pivoted and outsourced the gain-of-function research (in coronaviruses no less) to China—to the tune of a \$600K grant. You can see more details, including the important timeline of these events in this fantastically well-researched documentary.

Mr. Fauci, you have some explaining to do...and I hope the cameras are recording when you have to defend your actions. For now, let's turn our attention back to the virus...

#15: THE VIRUS CONTINUES TO MUTATE

Not only does the virus (like all viruses) continue to mutate, but according to world-renowned vaccine developer Geert Vanden Bossche (who you'll meet below if you don't know him) it's mutating about every 10 hours. How in the world are we going to keep creating vaccines to keep up with that level of mutation? We're not. Might that also explain why fully vaccinated people are continuing to catch covid?

Why, given that natural immunity has never ultimately failed humanity, do we suddenly not trust it? Why, if I ask questions like the above, or post links like what you find above, will my thoughts be deleted from all major social media platforms?

That brings me to the next troubling problem I have with these vaccines.

#16: CENSORSHIP...AND THE COMPLETE ABSENCE OF SCIENTIFIC DEBATE

I can't help but get snarky here, so humor me.

How did you enjoy all those nationally and globally-televised, robust debates put on by public health officials, and broadcast simultaneously on every major news station?

Wasn't it great hearing from the best minds in medicine, virology, epidemiology, economics, and vaccinology from all over the world as they *vigorously and respectfully* debated things like:

- Lockdowns
- Mask wearing
- Social-distancing
- Vaccine efficacy and safety trials
- How to screen for susceptibility to vaccine injury
- Therapeutics, (i.e. non-vaccine treatment options)

Wasn't it great seeing public health officials (who never treated anyone with covid) have their "science" questioned. Wasn't it great seeing the FDA panel publicly grill the vaccine

makers in prime time as they stood in the hot-seat of tough questions about products of which they have no liability?

Oh, wait...you didn't see those debates?

No, you didn't...because they never happened.

What happened instead was heavy-handed censorship of all but one narrative.

Ironically, Mark Zuckerberg can question vaccine safety, but I can't?

Hypocrite?

When did the first amendment become a suggestion?

It's the FIRST amendment Mark—the one our founders thought was most important.

With so much at stake, why are we fed only one narrative...shouldn't many perspectives be heard and professionally debated?

WHAT HAS HAPPENED TO SCIENCE?

What has happened to the scientific method of always challenging our assumptions?

What happened to lively debate in this country, or at least in Western society?

Why did anyone who disagrees with the WHO, or the CDC get censored so heavily?

Is the science of public health a religion now, or is science supposed to be about debate?

If someone says "the science is settled" that's how I know I'm dealing with someone who is closed minded.

By definition science (especially biological science) is never settled.

If it was, it would be dogma, not science.

OK, before I get too worked up, let me say this...

I WANT TO BE A GOOD CITIZEN

I really do.

If lockdowns work, I want to do my part and stay home.

If masks work, I want to wear them.

If social distancing is effective, I want to comply.

But, if there is evidence, they don't, I want to hear that evidence too.

If highly credentialed scientists have different opinions, I want to know what they think.

I want a chance to hear their arguments and make up my own mind.

I don't think I'm the smartest person in the world, but I think I can think.

Maybe I'm weird, but if someone is censored, then I REALLY want to hear what they think.

Don't you?

To all my friends who don't have a problem with censorship, will you have the same opinion when what you think is censored?

Is censorship not the technique of dictators, tyrants, and greedy, power-hungry people?

Is it not a sign that those who are doing the censoring know it's the only way they can win?

What if a man who spent his entire life developing vaccines was willing to put his entire reputation on the line and call on all global leaders to immediately stop the covid vaccines because of problems with the science?

What if he pleaded for an open-scientific debate on a global stage?

Would you want to hear what he has to say?

Would you want to see the debate he's asking for?

#17: THE WORLD'S LEADING VACCINOLOGIST IS SOUNDING THE ALARM...

Here is what may be the biggest reason this covid vaccine doesn't make sense to me.

When someone who is very pro-vaccine, who has spent his entire professional career overseeing the development of vaccines, is shouting from the mountaintops that we have a major problem, I think the man should be heard.

In case you missed it, and in case you care to watch it, [here is Geert Vanden Bossche](#), explaining:

Why the covid vaccine may be putting so much pressure on the virus that we are accelerating it's ability to mutate and become more deadly.

1. Why the covid vaccines may be creating vaccine-resistant viruses (similar to anti-biotic resistant bacteria).
2. Why, because of previous problems with Antibody Dependent Enhancement, we may be looking at a mass casualty event in the next few months/years.

If you want to see/read about a second, and longer, interview with Vanden Bossche, where he was asked some tough questions, you can check this out.



If half of what he says comes true, these vaccines could be the worst invention of all time.

If you don't like his science, take it up with him. I'm just the messenger. But I can also speak to covid personally.

#18: I ALREADY HAD COVID

I didn't enjoy it. It was a nasty cold for two days:

- Unrelenting butt/low-back aches
- Very low energy.
- Low-grade fever.

It was weird not being able to smell anything for a couple days. A week later, coffee tasted a little "off." But I survived. Now it appears (as it always has) that I have beautiful, natural, life-long immunity... ..not something likely to wear off in a few months if I get the vaccine.

In my body, and my household, covid is over.

In fact, now that I've had it, there is evidence the covid vaccine might actually be more dangerous for me. That is not a risk I'm willing to take.

IN SUMMARY

The above are just my reasons for not wanting the vaccine. Maybe my reasons make sense to you, maybe they don't. Whatever does makes sense to you, hopefully we can still be friends. I for one think there's a lot more that we have in common than what separates us.

We all want to live in a world of freedom.

- We all want to do our part to help others and to live well.
- We all want the right to express our opinions without fearing we'll be censored or viciously attacked.
- We all deserve to have the access to the facts so we can make informed decisions.

Agree or disagree with me; I'll treat you no differently.

You're a human just as worthy of love and respect as anyone else. For that I salute you, and I truly wish you all the best. I hope you found this helpful. If so, feel free to share.

If not, feel free to (kindly) let me know what didn't make sense to you and I'd be happy to hear your thoughts too. Stay curious and stay humble. Until next time,

Christian

PS. If you think I studied this topic well, think about how much thought I would put into helping you with your health. Helping people with their health is what I do all day, every day.

PPS. Health can't be injected, but it can be earned.

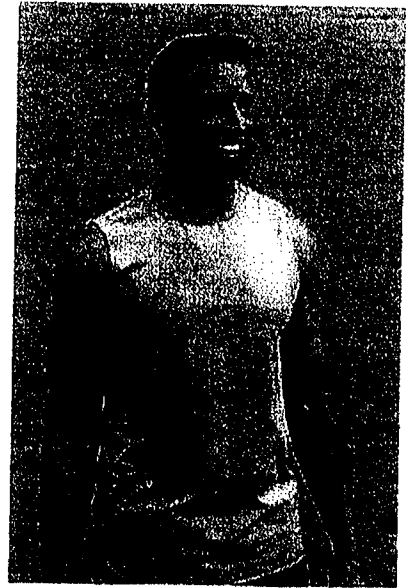
43) Marines' vaccine hesitancy presents early test for Biden as commander-in-chief. Nearly 40% of U.S. Marines who have been offered the coronavirus vaccine declined.

Many U.S. Marines' hesitancy to receive coronavirus vaccinations could prove to be a sticking point for President Biden as some Democrats pressure him to mandate vaccinations for service members.

Nearly 40% of U.S. Marines who have been offered the coronavirus vaccine declined, according to data released last week. That translates to approximately 75,500 Marines who have received the vaccine, and approximately 48,000 who have declined the vaccine. More than 100,000 Marines have yet to be offered the coronavirus vaccine, however. "We fully understand that widespread acceptance of the COVID-19 vaccine provides us with the best means to defeat this pandemic. The key to addressing this pandemic is building vaccine confidence. The vaccine is voluntary for all personnel at this time because the vaccines are authorized under an Emergency Use Authorization from the Food and Drug Administration," Marine Corps spokesman Capt. Andrew Wood told Fox News in a statement.

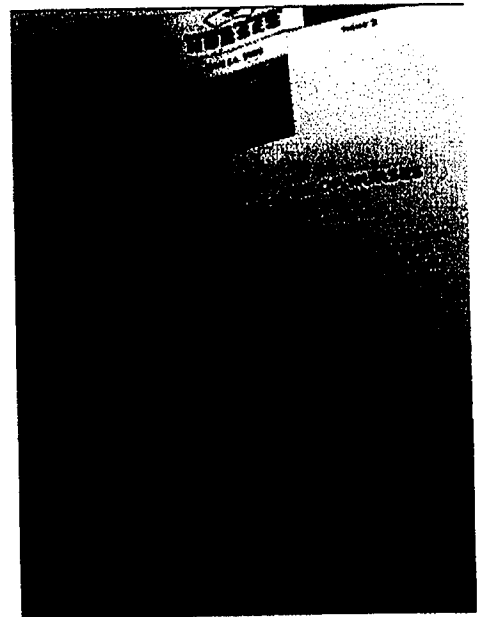
42) CRITICS ERUPT ON FAUCI AFTER HE SAYS TO NOT EAT INDOORS, EVEN AFTER GETTING VACCINE.

White House adviser Dr. Anthony Fauci told MSNBC on Sunday it's "still not" acceptable for Americans to eat indoors, even after they've received the COVID-19 vaccine. His comments come after he and other government experts have seemingly moved the pandemic goal posts for some time now. "Drinking indoors, restaurants, and bars. Is that OK now?" host Mehdi Hasan asked the National Institute of Allergy and Infectious Diseases director.



43) CONRAD BLACK: CORONAVIRUS HYSTERIA WILL SOON COME TO AN END (OCT 23/20).

One more time, I inflict upon readers my grievous reservations about the response of this and many other countries to the coronavirus. The basic facts are that the coronavirus is not fatal to 99.997 per cent of people under the age of 65, and not fatal to 94.6 per cent of people above the age of 65. The vast majority of people of all ages, including the elderly, have zero or minimal symptoms when afflicted by it. The approximately 98 per cent of people who do contract the coronavirus and survive it appear to be thereafter largely immune to it, at least for a time. It is of the nature of this virus that it cannot be prevented from spreading; the only durable cure for a whole society is a vaccine, and as many as seven largely effective vaccines are in the final stages of development and some will likely be available by the end of this year. New Zealand triumphantly announced a couple of months ago that there were no remaining coronavirus cases in the country and, accordingly, its restrictive measures were being relaxed. Parliamentarians threw order papers in the air and there were street parties and nationwide festivities, but within a couple of weeks, and despite screening processes for arriving people, the coronavirus had returned. The process for discovering, testing and distributing a coronavirus vaccine has been the subject of such intense and universal interest that the normal time required has been reduced by over a year. Vaccines are rarely 100 per cent effective, but they do drastically reduce the incidence of the illness, and they strengthen the morale of afflicted populations. ([see link for full article](#))



Research also shows that over 80 per cent of fatalities attributed to the coronavirus in advanced countries that test comprehensively, and report accurately are people who also suffer from other significant illnesses or vulnerabilities. The extent to which the coronavirus is the effective cause of death varies in each case and is sometimes nearly impossible to determine. But the underlying point is illustrated by the fact that the average age of people deemed to die from, or at least with, the coronavirus is within a few months of the actuarial life expectancy in each country; for example, the average age of Americans deemed to have died from the coronavirus and the average life expectancy of the American public are both 78. Almost all deaths are sad events, but the media has been irresponsible in its complicity in the maintenance of a higher degree of public anxiety than is justified by this illness. Our entire species has largely fallen into an excessive state of fear, evasion and defeatism.

- 44) 5,365 DEAD 238,949 Injuries: European Database of Adverse Drug Reactions for COVID-19 "Vaccines". Want to know stats and facts? Follow link.
- 45) 6000% Increase in Reported Vaccine Deaths 1st Quarter 2021 Compared to 1st Quarter 2020.
- 46) Front Line Nurse's Speak Out – not to be missed.

47) Screen Captures taken 4/13/21.

I know people that have had COVID-19. All have recovered.

Sadly, I now personally know of one that was completely asymptomatic when they went to get their "vaccine", and within hours required hospitalization and has now passed away.

16

23 Comments

We are forbidden to post anything about how many seniors and vulnerable people are dying from vaccines or face losing our job. I have seen many with disabilities pass within 2 weeks of getting a vaccine. I posted about it and was told by my employer any post about negative effects of vaccines are flagged and reported to employers to have employee remove..

48) THE NUREMBERG CODE AND ITS IMPACT ON CLINICAL RESEARCH

What Are The Nuremberg Code's Ethical Guidelines For Research?

The Nuremberg Code aimed to protect human subjects from enduring the kind of cruelty and exploitation the prisoners endured at concentration camps. The 10 elements of the code are:

- Voluntary consent is essential.
- The results of any experiment must be for the greater good of society.
- Human experiments should be based on previous animal experimentation.
- Experiments should be conducted by avoiding physical/mental suffering and injury.
- No experiments should be conducted if it is believed to cause death/disability.
- The risks should never exceed the benefits.
- Adequate facilities should be used to protect subjects.
- Experiments should be conducted only by qualified scientists.
- Subjects should be able to end their participation at any time.
- The scientist in charge must be prepared to terminate the experiment when injury, disability, or death is likely to occur.

NUREMBERG CODE VIOLATIONS CURRENTLY IN PROGRESS! URGENT!

49) COVID 19 INJECTION – YOU NEED TO FOLLOW THIS LINK! DOWNLOAD THE ARTICLE

"Our Operating System – Recognizing the broad potential of mRNA science, we set out to create an mRNA technology platform that functions very much like an operating system on a computer. It is designed so that it can plug and play interchangeably with different programs. In our case, the "program" or "app" is our mRNA drug – the unique mRNA sequence that codes for a protein." – Moderna.

"We think of it as information therapy" – Tal Zaks Chief Medical Officer of Moderna.

"DNA is highly programmable, just like a computer. And we can program a whole range of complex behaviors using DNA molecules." – Microsoft.

The experimental mRNA and DNA Covid 19 injections are a form of gene therapy.

"The world is engaged in the largest clinical trial, the largest global vaccination trial ever, and we will have enormous amounts of data." – Greg Hunt Minister for Health Australia

There is no proof, evidence or concrete claim from the manufacturers, health experts or governments that the injections impart immunity or inhibit transmissibility of SARS-CoV-2. (See Video Below. Time Reference 25:42) Therefore they do not meet the medical or legal definition of a vaccine.

EXPERIMENTAL VACCINE VS IMMUNE SYSTEM - EXPLAINED CLEARLY

IT IS AN MRNA PACKAGED IN A FAT ENVELOPE THAT IS DELIVERED TO A CELL – A SYNTHETIC PATHOGEN. Your own cells will make you sick. Doctors & Rocco Galatti discuss.

DOCTORS AROUND THE WORLD ISSUE DIRE WARNING: DO NOT GET THE COVID VACCINE!!

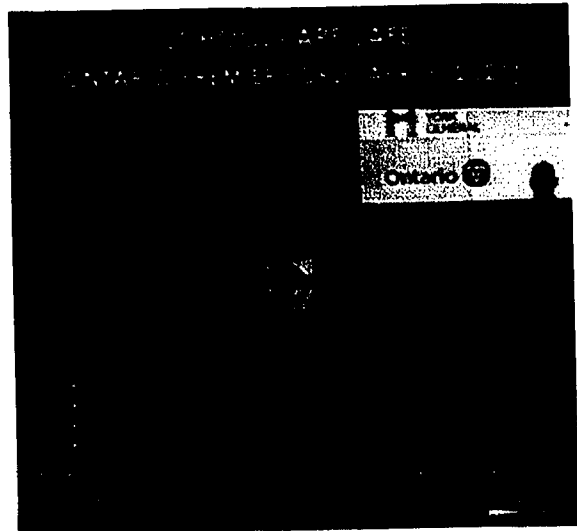
EARLIER TODAY (APRIL 14, 2021) DENMARK BECAME THE FIRST COUNTRY TO PERMANENTLY BAN THE ASTRAZENECA EXPERIMENTAL COVID ADENOVIRUS INJECTIONS THAT HAVE BEEN LINKED TO FATAL BLOOD CLOTS.

CDC ADMITS 5,800 FULLY VACCINATED PEOPLE BECAME INFECTED WITH COVID-19 AND 74 DIED

OPEN LETTER TO DR. BONNIE HENRY FROM BC PHYSICIAN RE: MODERNA VACCINE REACTIONS. THIS IS HEART BREAKING.

BECAUSE THIS MAKES SENSE, RIGHT? I MEAN CENTS!

- 50) NEW RULE: GIVE IT TO ME STRAIGHT, DOC | REAL TIME WITH BILL MAHER (HBO)
51) MAHER PRAISES DESANTIS, KNOCKS CUOMO, 'LIBERAL MEDIA' FOR GETTING COVID WRONG: 'THOSE ARE JUST FACTS' THE HBO STAR SLAMMED 'BLUE STATES' FOR KEEPING SCHOOLS CLOSED DESPITE MINIMAL HEALTH RISKS TO CHILDREN. DR. MARTIN KULLDORFF – HARVARD MEDICAL SCHOOL.





Dear Prime Minister Trudeau,

I know you share my deep concern at the escalating third wave of COVID-19. Health care workers and others are sounding the alarm bell—warning us that as ICUs fill up, the ability of our health care system to cope with the sickest of patients is at risk.

Earlier in the pandemic, you raised the possibility of a declaration of a public welfare emergency under The Emergencies Act. In light of the dire situation in Ontario, the question of The Emergencies Act must be revisited. I believe such a declaration, applied to Ontario, could help ensure a more coordinated delivery of vaccines to those who need them most, as well as enabling workers to prevent the spread by taking paid sick days and time off to get vaccinated.

Canada is not yet receiving enough vaccines and vaccines have been slow to arrive. In some places, this means that vaccines are not available to those in danger. The most glaring example of this is in the city of Toronto, where the wealthiest neighbourhoods have higher rates of vaccination than neighbourhoods where racialized and working-class people live—and which have higher levels of COVID-19 positivity.

The public health advice is clear. The virus is spreading in two places. Paid sick days and paid vaccination leave is urgently needed. We have spoken many times of the need to make changes to the federal sickness benefits to make it more accessible, more flexible and to offer full pay. For some workers, this is their only option. I am urging you to work with me to find solutions – including reimbursing employers who begin to provide paid sick time, if necessary.

Many provinces have taken steps to contain the virus and distribute vaccines to priority populations. I do not believe a declaration should apply to provinces where it is not needed. Ontario is a glaring exception. If public confidence in the government's response to COVID-19 is further eroded, it will make it almost impossible to stop the spread of the virus. The stakes could not be higher. Doctors have called the current situation in Ontario a "catastrophe." There is still time to change the course of the pandemic. There is still time to save lives. But we have to act.

I encourage you to convene a meeting with Opposition Leaders and Premiers to work together on solutions. We must come together and work as a united front against this catastrophic pandemic. There will be disagreements, but I believe we can find a way to put these aside to protect the health and lives of people across Canada.

You have my commitment to work with you on this most important challenge.

Sincerely,

Jagmeet Singh
Jagmeet Singh, MP (Burnaby South)
Leader of New Democratic Party of Canada

- 53) What is THE EMERGENCY ACT? The following is just a portion of the act. (**BOLD** added for emphasis). It is very important to read the whole act in order to understand the context of the following. A wise teacher once said, "text without a context, is a pre-text".

Orders and Regulations

Marginal note: Orders and regulations

8 (1) While a declaration of a public welfare emergency is in effect, the Governor in Council may make such orders or regulations with respect to the following matters as the Governor in Council believes, on reasonable grounds, are necessary for dealing with the emergency:

- (a) the regulation or **prohibition of travel** to, from or within any specified area, where necessary for the protection of the health or safety of individuals;
 - (b) the **evacuation of persons and the removal of personal property** from any specified area and the making of arrangements for the adequate care and protection of the persons and property;
 - (c) **the requisition, use or disposition of property;**
 - (d) the **authorization of or direction to any person**, or any person of a class of persons, to render essential services of a type that that person, or a person of that class, is competent to provide and the provision of reasonable compensation in respect of services so rendered;
 - (e) **the regulation of the distribution and availability of essential goods, services and resources;**
 - (f) **the authorization and making of emergency payments;**
 - (g) **the establishment of emergency shelters and hospitals;**
 - (h) the assessment of damage to any works or undertakings and the repair, replacement or restoration thereof;
 - (i) the assessment of damage to the environment and the elimination or alleviation of the damage; and
 - (j) the imposition
 - (i) on **summary conviction**, of a **fine** not exceeding five hundred dollars or imprisonment not exceeding six months or both that fine and imprisonment, or
 - (ii) **on indictment**, of a fine not exceeding five thousand dollars or imprisonment not exceeding five years or both that fine and imprisonment,
- for contravention of any order or regulation made under this section.**

54) Dr. Ryan Cole. COVID-19 BIOWEAPON, IVERMECTIN, & THE IMPORTANCE OF VITAMIN D.

55) The Pfizer-BioNTech COVID-19 vaccine has not been approved or licensed by the U.S. Food and Drug Administration (FDA), but has been authorized for emergency use by FDA under an Emergency Use Authorization (EUA) to prevent Coronavirus Disease 2019

(COVID-19) for use in individuals 16 years of age and older. The emergency use of this product is only authorized for the duration of the declaration that circumstances exist justifying the authorization of emergency use of the medical product under Section 564(b)(1) of the FD&C Act unless the declaration is terminated or authorization revoked sooner. Please see EUA Fact Sheet at www.cvdvaccine.com.

56) PFIZER - STUDIES IN ADDITIONAL POPULATIONS: PREGNANT WOMEN & CHILDREN UNDER 11.

57) USED BY MEDICAL DOCTORS: GLOBAL INFORMATION ABOUT PFIZER-BIONTECH COVID-19 VACCINE (ALSO KNOWN AS BNT162B2)

The approval status of the Pfizer-BioNTech COVID-19 Vaccine varies worldwide. In countries where the vaccine has not been approved by the relevant regulatory authority, it is an investigational drug, and its safety and efficacy have not been established.

58) FACEBOOK IS ALL ABOUT CENSORSHIP - HERE IS A REPORT YOU'LL WANT TO SEE.

59) EVEN CDC NOW ADMITS NO 'GOLD STANDARD' OF COVID19 VIRUS ISOLATE

Published on October 11, 2020, Written by John O'Sullivan

60) DAVID STAPLES: LOCKDOWNS WILL CAUSE 10 TIMES MORE HARM TO HUMAN HEALTH THAN COVID-19 ITSELF, SAYS INFECTIOUS DISEASE EXPERT

61) 8 WAYS MRNA COVID VACCINES CAN KILL YOU - DR. SHERRI TENPENNY

62) I TOOK THE MODERNA MRNA VACCINE WITHOUT DOING MY OWN RESEARCH [2021-02-19] - RN KRISTI SIMMONDS

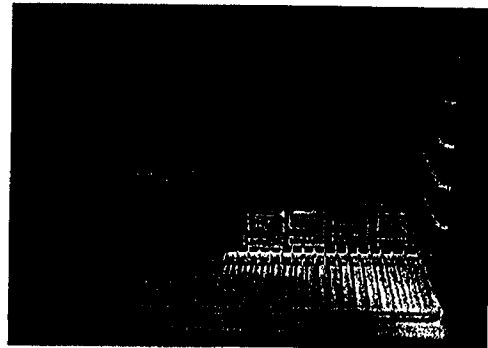
63) GERMAN MICROBIOLOGIST: "THEY ARE KILLING PEOPLE WITH THESE COVID VACCINES" TO REDUCE THE WORLD'S POPULATION. In this exclusive interview with The New American magazine's Senior Editor Alex Newman, world-renown German-Thai-American microbiologist Dr. Sucharit Bhakdi warns that the COVID hysteria is based on lies and that the COVID "vaccines" are set to cause a global catastrophe and a decimation of the human population.

Starting off, he explains that the PCR test has been abused to produce fear in a way that is unscientific.

Next, he explains what the mRNA vaccines are going to do to the human body in terms and using analogies that anyone can understand.

64) BLOOD-CLOTING ILLNESS PVT 30X MORE PREVALENT IN MODERNA, PFIZER COVID-19 RECIPIENTS THAN ASTRAZENECA - OXFORD RESEARCHERS. A potentially fatal blood-clotting disease is 30 times more common among people who have received the Covid-19 vaccines produced by Moderna and Pfizer than those given the troubled AstraZeneca jab, researchers have found.

A team of scientists from the University of Oxford has found that after vaccination, Vaxzevria (formerly AstraZeneca Covid-19 vaccine) recipients were less likely to suffer portal vein thrombosis (PVT) - blood clots in the artery from the intestines to the liver. For recipients of the viral vector Vaxzevria vaccine, the incidence rate for splanchnic thrombosis - clotting in the portal and other abdominal veins - is 1.6 per million people, according to data from the EU drugs regulator the European Medicines Agency (EMA). By contrast, some 44.9 cases of PVT per million people were seen among those who had



- been injected with the mRNA vaccines made by Moderna and Pfizer, the Oxford research, published on Thursday, said.
- 65) PROFESSIONAL MEDICAL OPINION. MY NAME IS MARK TROZZI. I am a medical doctor; I graduated in 1990 from The University of Western Ontario. I have been practicing Emergency Medicine for the past twenty-five years; and I have been on call in multiple emergency units since the onset of the so-called "pandemic", until February 2021, including one ER designated specifically for COVID-19. I am an Advanced Trauma Life Support professor with the College of Surgeons of America, and I hold teaching positions in multiple Canadian medical schools.
 - 66) URGENT! 5 DOCTORS AGREE THAT COVID-19 INJECTIONS ARE BIOWEAPONS AND DISCUSS WHAT TO DO ABOUT IT
 - 67) DR SPEAKING OUT ON THIS VACCINE THAT LOWERS YOUR ANTIBODIES & MAKES YOU SICKER ALL ANIMALS HAVE DIED
 - 68) MODERNA VACCINE WREAKS HAVOC ON LYTON BC AND LOCAL DOCTOR BLOWS WHISTLE! (BANNED ON YOUTUBE!)
 - 69) IN WORLD FIRST, DENMARK DITCHES ASTRAZENCA'S COVID-19 SHOT
 - 70) REGULATORS CAUTION ONTARIO DOCTOR FOR 'IRRESPONSIBLE' TWEETS ABOUT COVID-19
 - 71) 'THE BIGGEST EXPERIMENT EVER DONE'
Award-winning virologist, Dr. Sucharit Bhakdi elucidates why the rushed #Covid19 vaccine trials represent the world's largest medical experiment perpetrated on the globe in human history. Dr. Bhakdi details why the public should not only doubt it's efficacy, but also be wary of unstudied dangers.
 - 72) WHY VACCINE PASSPORTS GO AGAINST EVERYTHING CANADA IS SUPPOSED TO STAND FOR INSIGHTSPENCERFERNANDO APRIL 6, 2021. Becoming a 'show me your papers' society would be antithetical to the idea of freedom and privacy we claim to value in this country.
 - 73) HOW CIVIL DISOBEDIENCE SAFEGUARDS FREEDOM AND PREVENTS TYRANNY. This is an excellent video on The Doctrine of Blind Obedience.
 - 74) HOW TO FIGHT THE FINES AND GROW A SPINE. (colorful language in this video) Amanda Dawn Vollmer holds a degree of Doctor of Naturopathic Medicine from the Canadian College of Naturopathic Medicine in Toronto and a Bachelor of Science in Agricultural Biotechnology.
 - 75) 44-YEAR-OLD PASTOR DEAD AFTER MODERNA COVID SHOT – WANTED OTHER PASTORS AND AFRICAN AMERICANS TO FOLLOW HER EXAMPLE AND TAKE THE SHOT
 - 76) WHAT ABOUT THE POLICE? WHAT ARE THEY SAYING? WHAT ARE OTHERS SAYING ABOUT THEM? WHAT ARE CONCERNED CITIZENS TO DO?
 - 77) NO JAB FOR ME – EXCELLENT SITE TO ACCESS INFO – FAST & SIMPLE TO UNDERSTAND.
 - 78) EXPERTS DEMAND SCIENTIFIC DEBATE ON COVID WITH PREMIER FORD

The list of Doctors is as follows:

Dr. H. C. Tenenbaum (Professor of Laboratory Medicine and Pathobiology, Faculty of Medicine, University of Toronto),

Dr. B. A. Mallard (Professor of Immunogenetics, Department of Pathobiology, University of Guelph),

Dr. B. W. Bridle (Associate Professor of Viral Immunology, Department of Pathobiology, University of Guelph),

Dr. M Palmer (Associate Professor of Biochemistry, University of Waterloo),

Dr. P.E. Alexander (Assistant Professor of Health Research Methodology, Evidence-Based-Medicine, Department of Health Research, McMaster University),
 Dr. D. Decunha (Clinical and Chief Psychologist, Psychology Works, Toronto),
 Dr. P. Oldfield (PhD, Independent Scientific/Regulatory Consultant, Fellow of the Royal Society of Chemistry),
 Dr. L. Rapson (Assistant Professor Department of Family and Community Medicine U of Toronto),
 Dr. I. Bernstein (B.Sc., M.D., C.C.F.P., F.C.F.P., Lecturer, Department of Family and Community Medicine, University of Toronto).

79) PLEA TO HAVE DOUG FORD ARRESTED. RE: BREACH OF TRUST BY PUBLIC OFFICER (see letter below – 2 pages)

ATTENTION Ontario Police Associations and Ontario Provincial Police

URGENT: Plea to Arrest Doug Ford RE: Breach of Trust by Public Officer

This is an urgent appeal to Police to arrest Doug Ford for Breach of Trust by Public Officer, under section 122 of the Criminal Code of Canada.

As a Police officer, you swore an Oath and Declaration of Principles. As a concerned citizen, I am asking you to uphold that Oath and Declaration by arresting Doug Ford for his breaches and to not enforce the Ontario provincial regulations as listed below.

ENHANCED AUTHORITY

The "enhanced authority" granted to Police under O. Reg. 294/21: ENFORCEMENT OF COVID-19 MEASURES - made: April 16, 2021 (10:40 p.m.) and O. Reg. 298/21: ENFORCEMENT OF COVID-19 MEASURES - made: April 17, 2021 (5:40 p.m.) by the Premier of Ontario, Doug Ford, instructs all Police officers to violate their sworn Oath to uphold the Constitution of Canada, and their Declaration of Principles under their Police Services Act, to uphold and safeguard the fundamental rights guaranteed by the Canadian Charter of Rights and Freedoms. If section 2 of the O. Reg. 298/21 is enforced, Police will be violating sections 7, 9, 21(d) and 13 of the Charter. Many Police officers have stated they will not enforce this legislation. However, the simple fact that the legislation now exists to grant Police enhanced authority to breach their Oath, is the point of this urgent appeal. These new provincial legislations, while they may be legal, are in fact unlawful. Elected Officials cannot make laws which instruct Police to break their Oath to protect citizens. This is unconscionable and breaks all bonds of trust between the citizens of Ontario and Doug Ford, who is essentially pitting Police against citizens. These Regulations are creating a Police State in Ontario. Doug Ford's actions deviate from any standard expected of an elected Public Officer, which is to foster and keep public trust. These actions are unlawful and warrant his immediate arrest for Breach of Trust by Public Officer.

Even the Emergency Act states that special temporary measures, would be subject to the Canadian Charter of Rights and Freedoms and the Canadian Bill of Rights and must have regard to the International Covenant on Civil and Political Rights, particularly with respect to those fundamental rights that are not to be limited or abridged even in a national emergency.

BREACH OF TRUST BY PUBLIC OFFICER

In connection with the duties of his office as the elected Premier of Ontario, with his authority to amend legislation in Ontario under the Reopening Ontario Act, Doug Ford committed four counts of Breach of Trust by Public Officer. This is a criminal offence under section 122 of the Criminal Code of Canada.

First Two Counts - On Behalf of Ontario Citizens: One count per unlawful Regulation created by Doug Ford under his authority; the two Regulations noted above apply. The new Regulations now make interactions between the citizens and Police highly dangerous and further erode the already fragile relationship of trust between citizens and Police. Any hostile interaction that Police have with citizens will create complaints against the Police by citizens who will be able to substantiate their allegations of abuse of authority by Police, if Police enforce section 2 of the O. Reg. 298/21. In turn this will lead to costly legal fees for citizens and the Police legal defence fund (citizens vs Police).

Last Two Counts - On Behalf of Police in Ontario: One count per unlawful Regulation created by Doug Ford under his authority; the two Regulations noted above apply. The new Regulations authorize Police

Page 1 of 2

to violate their sworn Oath to uphold the Constitution of Canada and to violate their Principles under their Police Services Act, to uphold and safeguard the fundamental rights guaranteed by the Canadian Charter of Rights and Freedoms, by giving them "enhanced powers" under these Regulations to do so. Police are supposed to be members of the community and the very fabric of our society which earns trust and respect from citizens and thus, are true peacekeepers. The new Regulations seek to erode any possible trust left between Police and the citizens they have sworn to protect. If citizens do not trust Police to keep them safe, deliberate anarchy will erupt in Ontario with dire consequences for all.

SOCIETAL DISTRESS AND CONFUSION

For over 13 months, citizens have been in a constant state of fear, confusion, exhaustion and stress. These emotions have been further compounded by the continual and exorbitant changes that were made to the Reopening Ontario Act (the Act). This Act was revised and republished two times since it came into force in July 2020. The Act contains 37 Regulations, of which there have been over 230+ versions, and in the current version of the Act, three Regulations (O. Reg. 8/21, 294/21 and 298/21) - two are noted above, are missing. Citizens are continually non-compliant with the Regulations because they cannot keep up with them and cannot find them. 230+ versions of Regulations, within less than a year, are not reasonable. Not letting the last three major amendments under the Act, is not reasonable. How can Police justify ticketing citizens for non-compliance under the Reopening Ontario Act, when the current version of the Act is missing three regulations that citizens are being ticketed for? What has been created is an unfair, dishonest and non-transparent way of keeping the public reasonably informed of their rights. These actions demonstrate dishonesty to entrap citizens. The unfairness of these Regulations are notable signs of a corrupt government, a government that can no longer be allowed to govern in a free and democratic society.

The Reopening Ontario Act, has created a culture of snitches turning on each other to report allegations of wrongdoing under the Act. Citizens are being pitted against one another, condoned and encouraged by public officials. This is unacceptable. This Act is creating division amongst our friends and neighbours, and in our communities. And the collateral damage of closure to all "non-essential businesses" in Ontario, under the Act, is something our economy will never recover from. Does the fall-out of enforcing the regulations under the Act, instill faith and trust? The measures meant to keep us safe, are causing far more harm than good.

Police are not only peacekeepers, but citizens as well. Police and citizens share the same civil liberties, making uniforms irrelevant. Police are not above the law, nor are elected public officials. Police are sons and daughters, have spouses/partners, children, parents and grandparents who are also in need of the same protection from unjust laws. Our children go to school with yours. We worship together. We come together to celebrate life and death. Together, as a community, we are stronger.

This request is made given the above-mentioned concerns and facts. Please take into consideration the impact of not fulfilling this appeal as it would lead to the further eroding of our free and democratic society. Those doing harm must be held accountable for their actions.

Respectfully,

Name
 concerned citizen of Ontario

Page 2 of 2

80) GERMAN MICROBIOLOGIST: THEY ARE KILLING PEOPLE WITH THE COVID 19 VACCINES TO REDUCE THE WORLDS POULATION.

81) CANADIAN DOCTOR DEFIES GAG ORDER AND TELLS THE PUBLIC HOW THE MODERNA COVID INJECTIONS KILLED AND PERMANENTLY DISABLED INDIGENOUS PEOPLE IN HIS COMMUNITY.

Charles Hoffe has been a medical doctor for 28 years in the small, rural town of Lytton in British Columbia, Canada. The town is comprised of many indigenous groups and the "First Nations." When Dr. Hoffe was given 900 doses of the Moderna experimental COVID-19 injections, he administered the doses through the Lytton Medical Clinic to those who wanted them. He chose not to inject himself.

Dr. Hoffe reports that the result of injecting 900 people among the indigenous First Nations community was that 2 people went into anaphylactic shock, one person died, and several others have suffered what appear to be permanent disabilities. He relates how one of his patients is in so much pain now, that she prefers death to life.

82) FORMER PFIZER VICE PRESIDENT DR. YEADON: COVID VARIANTS NOT MORE DANGEROUS – BOOSTER SHOTS NOT NEEDED BUT COULD BE USED FOR MASS MURDER

83) DR. SHERRI TENPENNY: A DOCTOR AND A VOICE OF REASON ABOUT VACCINES AND CURRENT EVENTS. Dr. Sherri J. Tenpenny is an osteopathic medical doctor, board certified in three medical specialties. Widely regarded as the most knowledgeable and outspoken physician on the adverse impact that vaccines can have on health, Dr. Tenpenny has been a guest on hundreds of radio and national television programs (including the Dr. Oz Show and the Today Show Australia). She has lectured at Cleveland State University and Case Western Reserve Medical School, and has been a speaker at conventions, both nationally and internationally, as a recognized expert on a wide range topics within the field of Integrative Medicine including breast health, breast thermography, women's hormones, medical uses of iodine and the adverse effects vaccines have on health. Courses offered by Dr. Sherri Tenpenny. Research Library – various vaccination links

84) COVID VACCINATION - MENSTRUAL CHANGES, FERTILITY, SHEDDING - IMPORTANT DISCUSSION

85) DEL BIGTREE - ABNORMAL MENSTRUAL BLEEDING AFTER VACCINE - THE HIGHWIRE

86) WORLD BANK \$500M PANDEMIC BONDS - WAITING FOR PEOPLE TO DIE. PANDEMIC BONDS? FOLLOW THE MONEY!!!!!!!!!!!!!!!!!!!!!!!!!!!!

87) WEF CYBERPOLYGON - "NEXT CRISIS BIGGER THAN COVID" - CYBERPANDEMIC. THE WORLD ECONOMIC FORUM – SPEAKS. FINANCE AND POWER GRID WILL COME DOWN.

88) WWW.ICEAGEFARMER.COM (this is off topic – well worth your time to look at)

Oregon Bill to BAN Livestock – Stunning War on Farming/Ranching

by Ice Age Farmer | Apr 23, 2021 | Podcast | 0 comments

Oregon Bill IP13 would criminalize raising food animals in the state, and reclassify animal husbandry practices as "sexual assault." The bill specifies that animals can only be eaten after dying of natural causes (at which point, aged/diseased meat is not good).

Oregon's 12,000 beef producers raising about 1.3 million head of cattle are slated for elimination, as traditional farming and ranching is shut down in favor of lab-grown meat and indoor farms owned by the technocrats — a perfect way to force the population into perfect slavery. Christian breaks it down in this Ice Age Farmer broadcast.

89) 7,766 DEAD 330,218 Injuries: European Database of Adverse Drug Reactions for COVID-19 "Vaccines"

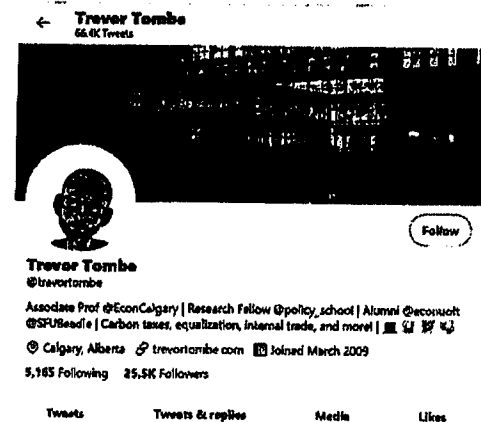
Taken from my personal FB page from one of my friends who has 2 school age children. Direct quote.

April 28, 2021.

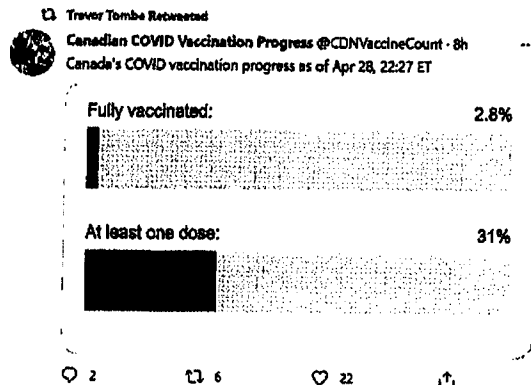
Jaye Torley

If there is a God or someone with power... please send our kids back to class. I can't listen to the cries of frustration, negativity, self-doubt, loneliness....I don't know what else to do to support him and his mental health. I hug him, I hold him, I tell him that "he can" when he say's "I can't". and virtual friends / play-dates are not what our kids need to these days!
#concernedmom

90) UP TO DATE STATS TREVOR TOMBE (University of Calgary / Assoc. Prof)
Samples of stats and facts below.

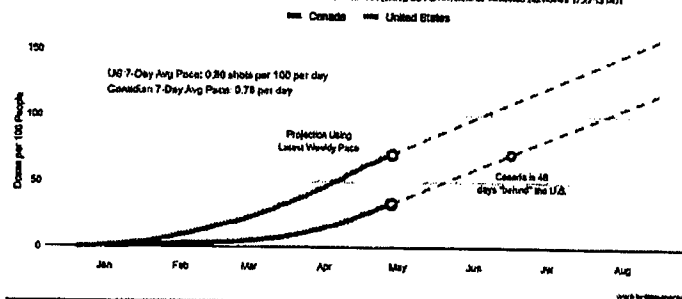


Trevor Tombe
@trevortombe
Feb 23
Canada's equalization program is one of the most important federal transfers — and one of the most misunderstood. To help, I'm "very" excited to share a new tool from @FONCanada: an [interactive equalization simulator](#).
financesofthenation.ca/2021/02/23/new... #callecon #canpoli



COVID-19 Vaccination in Canada and the U.S. (Doses per 100 Persons)

Display the current temporary vaccination administration at about 100 people, based on most recent data to April 28, 2021.
Source: Data calculated from Our World in Data and U.S. CDC COVID-19 Tracker as of April 28, 2021. Last updated 2021-04-28 17:29:13 EDT



91) Police take Court Action against Ontario Government over COVID Measures Enforcement Duties

– PRESS RELEASE –

Ten (10) active, and five (5) retired, Police officers have launched an Application in Ontario Superior Court, to seek clarification, and challenge, the Province's Covid-measures, and their enforcement, as breaching and violating their Police Oath which Oath includes upholding the Constitution.

Their Notice of Application can be viewed on the Constitutional Rights Centre website at: constitutionalrightscentre.ca

Some of the Applicants will hold a brief press conference, along with their legal counsel, on: Thursday, April 29th at 4:30 p.m. EST

You can join in at: www.wholeheartedmedia.ca

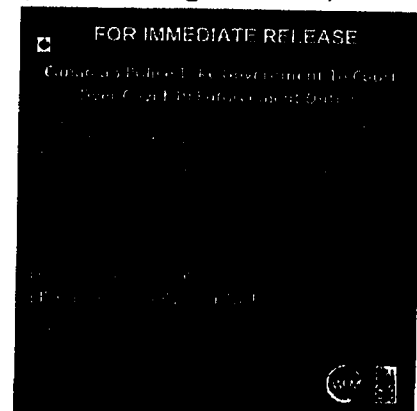
Any questions may be directed to legal counsel at: Rocco Galati

Rocco Galati Law Firm Professional Corporation

Tel: (416) 530-9864

Email: rocco@idirect.com

WARMINGTON: THESE COPS DON'T BELIEVE IN ARRESTING PEOPLE FOR BEING ON THE STREET



- 92) POLICE ON GUARD FOR THEE We are a group of active duty and retired police officers who have assembled to create a haven of truth and justice for all members.

Mission Statement

That as active and retired Police Officers, our mission is:

To honour our Oath to uphold the Constitution of Canada, and to the best of our abilities, preserve the peace, prevent offences and discharge other duties as a Police Officer faithfully, impartially and according to law.

To continue to serve and protect the public, while remaining independent of political influence. To repair and regain public trust which is being damaged and lost due to the enforcement of Emergency measures.

To encourage active-duty members to join our court action requesting clarification on the validity of emergency measures being passed by our Federal, Provincial and Municipal governments.

**POLICE ON GUARD FOR THEE
WILL YOU STAND?**

We believe that these measures are not only in conflict with our Charter Oath but also place active duty police officers in an untenable position when directed by politicians and senior management to enforce these emergency measures.

We are a group of concerned retired and active duty peace officers looking to see an end to unconstitutional public health orders. Peace officers are being directed to defy their oath to uphold the rights of the people they protect and this must end.

- 93) HAMILTON OFFERS RACE-BASED VACCINE APPOINTMENTS
94) LIBERAL GOVERNMENT – LEAKED DOCUMENT – COMMENTARY FROM ROCCO GALATI. FILMED APRIL 23, 2021.
95) DR. ROGER HODKINSON – ALBERTA DOCTOR – OUT SPOKEN ABOUT THE PANDEMIC
96) THE NOVEL CORONAVIRUS' SPIKE PROTEIN PLAYS ADDITIONAL KEY ROLE IN ILLNESS - SALK INSTITUTE FOR BIOLOGICAL STUDIES The novel coronavirus' spike protein plays additional key role in illness. **Salk researchers and collaborators show how the protein damages cells, confirming COVID-19 as a primarily vascular disease**
LA JOLLA—Scientists have known for a while that SARS-CoV-2's distinctive "spike" proteins help the virus infect its host by latching on to healthy cells. Now, a major new study shows that the virus spike proteins (which behave very differently than those safely encoded by vaccines) also play a key role in the disease itself.
The paper, published on April 30, 2021, in *Circulation Research*, also shows conclusively that COVID-19 is a vascular disease, demonstrating exactly how the SARS-CoV-2 virus damages and attacks the vascular system on a cellular level. The findings help explain COVID-19's wide variety of seemingly unconnected complications, and could open the door for new research into more effective therapies.
97) EXTERMINATION MACHINE UNMASKED: WHY VACCINATED PEOPLE ARE MAKING HEALTHY PEOPLE SICK
98) THE FDA WILL NOT AUTHORIZE OR APPROVE OF ANY COVID-19 VACCINE.
99) YOUR RIGHTS TO DECLINE MANDATORY COVID VACCINES

- 100) NURSE FROM HALIFAX BREAKS HER SILENCE ON THE COVID TYRANNY "AGENDA
 101) VIDEO SHOWS PALLETS OF VENTILATORS DUMPED IN MIAMI-DADE LANDFILL
 102) AMERICA'S FRONTLINE DOCTORS: COVID-VACCINATED CAN 'SHED' SPIKE
PROTEIN, HARMING UNVACCINATED.

As these experimental vaccines create 'spike proteins,' vaccinated individuals 'can shed some of these particles to close contacts' causing disease in them, including in children. LOS ANGELES, California, May 3, 2021 ([LifeSiteNews](#)) — In their latest issue brief, America's Frontline Doctors (AFLDS) warned how spike proteins resulting from experimental COVID-19 gene therapy vaccines have the capacity to 1.) pass through the "blood-brain barrier" causing neurological damage, 2.) be "shed" by the vaccinated, bringing about sickness in unvaccinated children and adults, and 3.) cause irregular vaginal bleeding in women. Released last week and titled "Identifying Post-vaccination Complications & Their Causes: an Analysis of Covid-19 Patient Data," the stated purpose of the document is "to provide additional information for concerned citizens, health experts, and policymakers about adverse events and other post-vaccination issues resulting from the three experimental COVID-19 vaccines currently administered under EUA (emergency use authorization)" by the U.S. Food and Drug Administration (FDA).

- 100) HIGHLY RESPECTED GENETICIST ISSUES WARNING ABOUT ASTRAZENECA SHOT FOR YOUNG PEOPLE.

'If you are between 20 and 30 years old, the risk is higher to be vaccinated by AstraZeneca than not to be vaccinated,' French scientist Axel Kahn said.

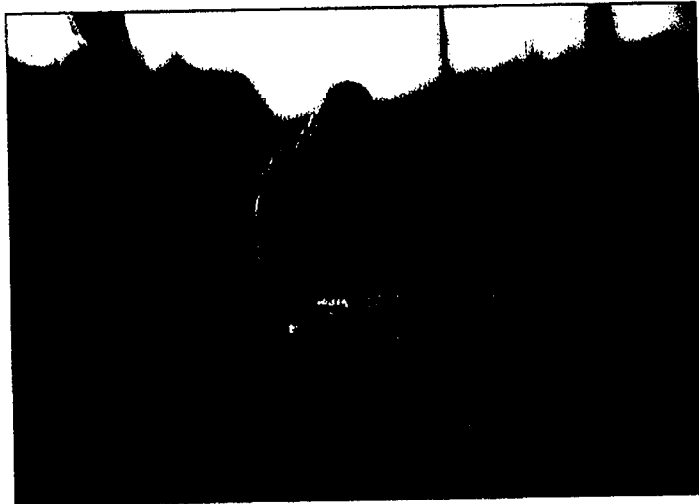
- 101) LIFE FACTS – COVID 19 NIH HIT WITH LAWSUIT FOR FAILING TO PRODUCE DOCUMENTS RELATED TO CONTROVERSIAL GAIN-OF-FUNCTION RESEARCH

- 102) THE NEW NUREMBERG TRIALS 2021. THANK GOD FOR DR. REINER FUELLMICH. More details found at the Corona investigation Committee. (numerous evidence-based interviews). Lawyers from all over the world. Special Session: International Legal Offensive - Part 2.

Since mid-July 2020, the Corona Committee has been conducting live, multi-hour sessions to investigate why federal and state governments imposed unprecedented restrictions as part of the Coronavirus response and what the consequences have been and still are for people. Learn more about the committee: <https://corona-ausschuss.de> For anonymous reports: <https://securewhistleblower.com> Telegram Committee: https://t.me/s/Corona_Ausschuss Telegram OVALmedia: <https://t.me/s/OVALmedia>



A team of over 1,000 lawyers and over 10,000 medical experts led by Dr. Reiner Fuellmich have begun legal proceedings against the CDC, WHO & the Davos Group for crimes against humanity. Fuellmich and his team present the faulty PCR test and the order for doctors to label any comorbidity death as a Covid death as fraud. The PCR test was never designed to detect pathogens and is 100% faulty at 35 cycles. All the PCR tests overseen by



the CDC are set at 37 to 45 cycles. The CDC admits that any tests over 28 cycles are not admissible for a positive reliable result. This alone invalidates over 90% of the alleged covid cases / "infections" tracked by the use of this faulty test.

In addition to the flawed tests and fraudulent death certificates, the "experimental" vaccine itself is in violation of Article 32 of the Geneva Convention. Under Article 32 of the 1949 Geneva Convention IV, "mutilation and medical or scientific experiments not necessitated by the medical treatment of a protected person" are prohibited. According to Article 147, conducting biological experiments on protected persons is a grave breach of the Convention. The "experimental" vaccine is in violation of all 10 of the Nuremberg Codes which carry the death penalty for those who seek to violate these International Laws. The "vaccine" fails to meet the following five requirements to be considered a vaccine and is by definition a medical "experiment" and trial: follow link for more detail.

103) WHAT ARE THE MEDICAL DOCTORS SAYING? (Vaccines in general)

Dr. Nancy Banks – <http://bit.ly/1lp0alm>
 Dr. Russell Blaylock – <http://bit.ly/1BXxQZL>
 Dr. Sherri Tenpenny – <http://bit.ly/1MPVbix>
 Dr. Suzanne Humphries – <http://bit.ly/17sKDbf>
 Dr. Larry Palevsky – <http://bit.ly/1LLEjf6>
 Dr. Toni Bark – <http://bit.ly/1CYM9RB>
 Dr. Andrew Wakefield – <http://bit.ly/1MuyNzo>
 Dr. Meryl Nass – <http://bit.ly/1DGzJsc>
 Dr. Raymond Obomsawin – <http://bit.ly/1G9ZXYI>
 Dr. Ghislaine Lanctot – <http://bit.ly/1MrVeUL>
 Dr. Robert Rowen – <http://bit.ly/1SIELeF>
 Dr. David Ayoub – <http://bit.ly/1SIELve>
 Dr. Boyd Haley PhD – <http://bit.ly/1KsdVby>
 Dr. Rashid Buttar – <http://bit.ly/1qWOKL6>
 Dr. Roby Mitchell – <http://bit.ly/1gdgEZU>
 Dr. Ken Stoller – <http://bit.ly/1MPVqll>
 Dr. Mayer Eisenstein – <http://bit.ly/1LLEqHH>
 Dr. Frank Engley, PhD – <http://bit.ly/1OHbLDI>
 Dr. David Davis – <http://bit.ly/1gdgJwo>
 Dr. Tetyana Obukhanych – <http://bit.ly/16Z7k6J>

Dr. Harold E Buttram – <http://bit.ly/1Kru6Df>
 Dr. Kelly Brogan – <http://bit.ly/1D31pfQ>
 Dr. RC Tent – <http://bit.ly/1MPVwmU>
 Dr. Rebecca Carley – <http://bit.ly/K49F4d>
 Dr. Andrew Moulden – <http://bit.ly/1fwzKJu>
 Dr. Jack Wolfson – <http://bit.ly/1wtPHRA>
 Dr. Michael Elice – <http://bit.ly/1KsdpKA>
 Dr. Terry Wahls – <http://bit.ly/1gWOBhd>
 Dr. Stephanie Seneff – <http://bit.ly/1OtWxAy>
 Dr. Paul Thomas – <http://bit.ly/1DpeXPf>
 Many doctors talking at once – <http://bit.ly/1MPVHOv>
 Dr. Richard Moskowitz – (has been censored)
 Dr. Jane Orient – <http://bit.ly/1MXX7pb>
 Dr. Richard Deth – <http://bit.ly/1GQDL10>
 Dr. Lucija Tomljenovic – <http://bit.ly/1eqiPr5>
 Dr Chris Shaw – <http://bit.ly/1lIGiBp>
 Dr. Susan McCreddie – <http://bit.ly/1CqaN83>
 Dr. Mary Ann Block – <http://bit.ly/1OHcyUX>
 Dr. David Brownstein – <http://bit.ly/1EaHl9A>
 Dr. Jayne Donegan – <http://bit.ly/1wOk4Zz>
 Dr. Troy Ross – (has been censored)
 Dr. Philip Incao – <http://bit.ly/1ghE7sS>
 Dr. Joseph Mercola – <http://bit.ly/18dE38l>
 Dr. Jeff Bradstreet – <http://bit.ly/1MaX0cC>
 Dr. Robert Mendelson – <http://bit.ly/1JpAEQr>
 Dr Theresa Deisher <https://m.youtube.com/watch?feature=youtu.be&v=6Bc6WX33SuE>
 Dr. Sam Eggertsen <https://m.youtube.com/watch?v=8LB-3xkeDAE>

IN THESE DOCUMENTARIES HUNDREDS MORE DOCTORS TESTIFY THAT VACCINES AREN'T SAFE, OR EFFECTIVE.

Vaccination – The Silent Epidemic: <http://bit.ly/1vvQJ2W>
 The Greater Good – <http://bit.ly/1icxh8j>
 Shots In The Dark – <http://bit.ly/1ObtC8h>
 Vaccination The Hidden Truth – <http://bit.ly/KEYDUh>
 Vaccine Nation – <http://bit.ly/1iKNvplU>
 Vaccination – The Truth About Vaccines: <http://bit.ly/1vlpwvU>
 Lethal Injection – <http://bit.ly/1URN78J>
 Bought – <http://bit.ly/1M7YSlr>
 Deadly Immunity – <http://bit.ly/1KUg64Z>
 Autism – Made in the USA: <http://bit.ly/1J8WQNS>
 Beyond Treason – <http://bit.ly/1B7kmvt>
 Trace Amounts – <http://bit.ly/1vAH3Hv>
 Why We Don't Vaccinate – <http://bit.ly/1KbXhuf>

104) COULD VACCINES MAKE COVID-19 WORSE?

More and more scientists are expressing their fears that the #Covid19 vaccines might do more harm than good. Dr. Andrew Read, who has been focusing on virus evolution, illustrates how vaccines have a history of making pathogens deadlier, specifically with Marek Disease in chickens. Are Covid vaccines evolution proof?

105) KELLY VELA - BAN VACCINE MANDATES IN TEXAS - SENATE HEARING ON... | FACEBOOK. THIS IS PURE GOLD - THIS IS A MUST LISTEN

106) Confirmed Cases of COVID-19

Following Vaccination in Ontario:
December 14, 2020 to April 17, 2021

107) Dr. Ron Brown (University of Waterloo) Discusses Outcome Reporting Bias in COVID-19 mRNA Clinical Trials I Interview. (April 10, 2021)

108) Origin of Covid — Following the Clues. This is a long read (about 40 minutes or so) but, well worth the time to do so. The history of something may help us to ascertain its future. It's a good article for non scientific minds.

109) US SUPREME COURT SAYS PFEIZER, MODERNA MAY OWN YOUR GENES ONCE YOU'RE INJECTED. The synthetic mRNA of Pfizer and Moderna, along with the viral vector DNA delivery systems of Johnson & Johnson and AstraZeneca, change your genetic code, making you "genetically-modified." Granted mainstream media say the foregoing is "conspiracy theory." But Moderna Chief Medical Officer Tal Zaks tells you straight up that 1) the shots change your genetic code and 2) the shots do not stop the spread of COVID-19. He says the Moderna shot is "hacking the software of life."

LISTEN TO TAL ZAKS CHIEF MEDICAL OFFICER OF MODERNA - TELL YOU STRAIGHT!
HACKING THE SOFTWARE OF LIFE!!!

110) STUDY: 'Third Wave' Of Sickness And Death Will Be Dominated By Those Who Have Been Fully Vaccinated. Between 60 and 70 percent of "third wave" COVID deaths and hospitalizations will be from people who were fully vaccinated, according to the study, Summary of Further Modeling of Easing Restrictions, published March 31 by the London School of Hygiene & Tropical Medicine.

111) HALT COVID VACCINE, PROMINENT SCIENTIST TELLS CDC

In a public comment to the CDC, molecular biologist and toxicologist Dr. Janci Chunn Lindsay, Ph.D., called to immediately halt Covid vaccine production and distribution. Citing fertility, blood-clotting concerns (coagulopathy), and immune escape, Dr. Lindsay explained to the committee the scientific evidence showing that the coronavirus vaccines are not safe.

On April 23, 2021, the CDC's Advisory Committee on Immunization Practices held a meeting in Atlanta, Georgia. The focus of this ACIP meeting was blood clotting disorders following Covid vaccines. Dr. Janci Chunn Lindsay spoke to the CDC during the time set aside for public comment.

CHOOSING YOUR COVID-19 VACCINE



Pfizer: \$4.7 billion in fines for false claims, drug and medical equipment safety violations, off-label promotion, corrupt practices, kickbacks, and bribery.

moderna

Moderna: Has never brought a vaccine to market since its founding, despite fielding 9+ vaccine candidates, none of which made it through phase 3 clinical trials.



Johnson & Johnson

Johnson & Johnson: Named in hundreds of thousands of lawsuits for toxic and/or dangerous products, including drugs, shampoos, medical equipment, and asbestos-contaminated baby powder.

AstraZeneca

AstraZeneca: Suspended by two dozen European countries due to severe, lethal adverse reactions, like blood clots.

Don't worry, you're in safe hands!

The ensorship on social media in particular and the internet in general is relentless. Here is a slightly edited, annotated censorship-proof transcript of Dr. Janci Chunn Lindsay's 3-minute comment.

You can listen to her testimony on YouTube HERE (for now, anyway. YouTube will likely ensor it).

We simply cannot put these [vaccines] in our children who are at .002% risk for Covid mortality, if infected, or any more of the child-bearing age population without thoroughly investigating this matter. [If we do], we could potentially sterilize an entire generation. Speculation that this will not occur and a few anecdotal reports of pregnancies within the trial are *not* sufficient proof that this is not impacting on a population-wide scale.

Covid vaccine causes blood disorders. Secondly, all of the gene therapies [Covid vaccines], are causing coagulopathy. [Coagulopathy when the body's blood clotting system is impaired.] This is not isolated to one manufacturer. And this is not isolated to one age group. As we are seeing coagulopathy deaths in healthy young adults with no secondary comorbidities. There have been 795 reports related to blood clotting disorders as of April 9th in the VAERS reporting system, 338 of these being due to thrombocytopenia.

There are forward and backward mechanistic principles for why this is happening. The natural infection is known to cause coagulopathy due to the spike protein. All gene therapy vaccines direct the body to make the spike protein. Zhang et al in [a scientific paper published in the Journal of Hematology & Oncology] in September 2020 showed that if you infuse spike protein into mice that have humanized ACE-2 receptors on blood platelets that you also get disseminated thrombosis.

Spike protein incubated with human blood in vitro also caused blood clot development which was resistant to fibrinolysis. [Fibrinolysis is the body's process of breaking down blood clots]. The spike protein is causing thrombotic events, which cannot be resolved through natural means. And all vaccines must be halted in the hope that they can be reformulated to guard against this adverse effect.

Third, there is strong evidence for immune escape—

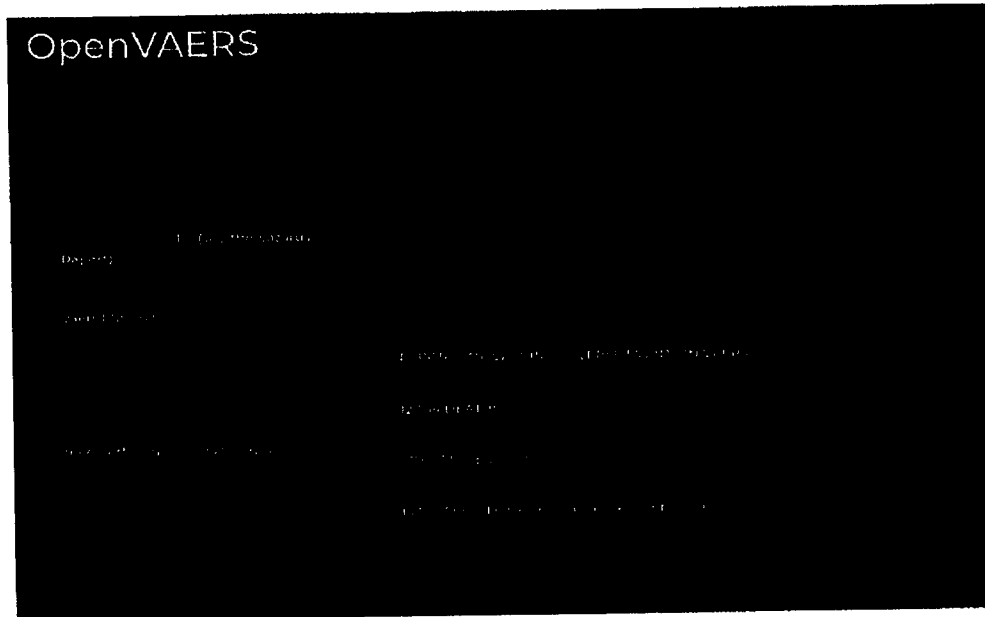
112) COVID SHOT KILLING LARGE NUMBERS, WARNS TOP COVID DOCTOR PETER MCCULLOUGH

In this interview with The New American magazine Senior Editor Alex Newman, the internationally renowned Dr. Peter McCullough—the doctor with the most citations in the National Library of Medicine on these topics—warned that the COVID shot was already causing thousands of deaths and tens of thousands of hospitalizations that have been recorded. And that's just the tip of the iceberg, he warned. In normal circumstances, 50

deaths reported to VAERS would result in a drug being taken off market immediately. In the case of the COVID shots, thousands have already been reported, and yet the mass vaccination programs continue to be pushed. Dr. McCullough, a professor of medicine who developed a globally acclaimed and highly successful COVID treatment protocol, also emphasized that there have been many unnecessary deaths as a result of policy decisions made at various levels of government.

113)

114) HOLD ON WAIT A MINUTE!!! ONLY 1% OF VACCINE INJURIES ARE REPORTED. GO HERE FOR LAZARUS REPORT. THEN GO TO OPENVAERS.



115) The Israeli People's Committee Report of Adverse Events Related to the Corona Vaccine, April 2021: Never has a vaccine injured so many.

<https://www.the-people-committee.com/>

Here are our main findings:

- We received 288 reports of deaths occurring in proximity to the vaccination (90% up to 10 days after the vaccination). 64% are men. According to the Ministry of Health's figures: only 45 deaths occurred in proximity to the vaccination.
- According to data from the Central Bureau of Statistics (CBS), during January-February 2021, in the midst of the vaccination operation, there was a 22% increase in overall mortality in Israel compared to the bi-monthly average mortality in the previous year. In fact, the period of January-February 2021 is the deadliest one in the last decade, with the highest overall mortality rates, when compared to the corresponding months over the last 10 years.
- Among the age group of 20-29, the increase in overall mortality rate is even more dramatic. In this group, during the same vaccination period, January-February

2021, there has been a 32% increase in overall mortality compared to the bi-monthly average mortality in 2020.

- A statistical analysis of data from the CBS combined with information from the Ministry of Health leads to the conclusion that the mortality rate amongst the vaccinated is estimated at 1:5,000 (1:13,000 for ages 20-49, 1:6,000 for ages 50-69, 1:1600 for ages 70+). According to this assessment, it is possible to estimate that the number of deaths in Israel that have occurred in proximity to the vaccination, currently stands at about 1,000-1,100 people.
- There is a high correlation between the number of people vaccinated per day and the number of deaths per day, in the range of up to 10 days post vaccination in all age groups. For ages 20-49 – a range of 9 days from the date of vaccination to death; for ages 50-69 – 5 days from the date of vaccination to death; for ages 70 and up – 3 days from the date of vaccination to death.
- The risk of death after the second vaccination is higher than the risk of death after the first vaccination.
- Up until the publication date of this report, a total of 2,066 reports of adverse events have been recorded by The Israeli People's Committee and the figures continue to flow in. These reports indicate damage to almost every system in the human body. These figures also highlight the inconceivable gap between official Israeli media reports and what is actually happening, enabling a "two worlds" situation due to journalistic failure to sense, identify and report on what is actually happening in citizens' real-life.
- There are close similarities in the reports of adverse events from countries with relatively high vaccination rates, with hundreds of death reports, as well as reports of damage to many human body systems.
- In our analysis, we have found a relatively high rate of cardiac-related injuries. 26% of all cardiac events occurred in young people below the age of 40, the most common diagnosis in these cases being myocarditis or pericarditis.
- Additionally, a high prevalence of massive vaginal bleeding, neurological, skeletal and skin damages have been observed.
- It should be noted that a significant number of adverse events reported are related, directly or indirectly, to coagulopathy (myocardial infarction, stroke, miscarriages, disruption of blood flow to the limbs, pulmonary embolism).
- The reporting of adverse events from hospitals and HMO clinics has been very low, and there is a tendency for a diagnostic bias that excludes the possibility of a link between the adverse events and the vaccination. There are probably many thousands of unreported cases.
- In light of the extent and severity of adverse events we are witnessing, we would like to express the committee's position that vaccinating children may also lead to adverse events, as observed in adults, which could result in the death of completely healthy children. Since the coronavirus does not endanger children at all, the committee believes that the Israeli government's intention to vaccinate children endangers their lives, their health, and their future development.
- Two-days prior to the publication of this report (in Hebrew), we sadly learned of the death of a two-year-old girl in proximity to receiving the Corona vaccine, according to a report in the US VAERS system. We hope that the radical idea of vaccinating children against the coronavirus will soon be taken off the table; and if not, that it will be completely rejected by most of the parents in Israel.
- Never has a vaccine injured so many! The American VAERS system reveals 2,204 reports of mortality amongst vaccinated people in the United States in the first quarter of 2021, a figure that reflects a rise of thousands of percent from the annual average, which stood at 108 reports per year.

116) **DEFENDING CHILDREN'S RIGHTS - POST PRESS CONFERENCE INTERVIEW**

CLICK TO READ COURT APPLICATION FILED | APR 20, 2021

117) **DECLARATION OF CANADIAN PHYSICIANS FOR SCIENCE AND TRUTH.**

OVER 7,000 CONCERNED CITIZENS AND 261 DOCTORS HAVE SIGNED THE DECLARATION. FOLLOW THIS LINK FOR A DETAILED LIST OF THE DOCTORS.

The Declaration

We are a broad and diverse group of Canadian physicians from across Canada who are sending out this urgent declaration to the Colleges of Physicians and Surgeons of our various Provinces and Territories and to the Public at large, whom we serve.

On April 30, 2021, Ontario's physician licensing body, the College of Physicians and Surgeons of Ontario (CPSO), issued a statement forbidding physicians from questioning or debating any or all of the official measures imposed in response to COVID-19.¹

The CPSO then went on to threaten physicians with punishment – investigations and disciplinary action.

We regard this recent statement of the CPSO to be unethical, anti-science and deeply disturbing.

As physicians, our primary duty of care is not to the CPSO or any other authority, but to our patients.

When we became physicians, we pledged to put our patients first and that our ethical and professional duty is always first toward our patients. The CPSO statement orders us to violate our duty and pledge to our patients in the following ways:

1. Denial of the Scientific Method itself: The CPSO is ordering physicians to put aside the scientific method and to not debate the processes and conclusions of science.

We physicians know and continue to believe that throughout history, opposing views, vigorous debate and openness to new ideas have been the bedrock of scientific progress. Any major advance in science has been arrived at by practitioners vigorously questioning "official" narratives and following a different path in the pursuit of truth.

2. Violation of our Pledge to use Evidence-Based Medicine for our patients: By ordering us not to debate and not to question, the CPSO is also asking us to violate our pledge to our patients that we will always seek the best, evidence-based scientific methods for them and advocate vigorously on their behalf.

The CPSO statement orders physicians for example, not to discuss or communicate with the public about "lockdown" measures. Lockdown measures are the subject of lively debate by world-renown and widely respected experts and there are widely divergent views on this subject. The explicitly anti-lockdown **Great Barrington Declaration** – <https://gbdeclaration.org> – was written by experts from Harvard, Stanford and Oxford Universities and more than 40,000 physicians from all over the world have signed this declaration. Several international experts

including Martin Kuldorf (Harvard), David Katz (Yale), Jay Bhattacharya (Stanford) and Sunetra Gupta (Oxford) continue to strongly oppose lockdowns.

The CPSO is ordering physicians to express only pro-lockdown views, or else face investigation and discipline. This tyrannical, anti-science CPSO directive is regarded by thousands of Canadian physicians and scientists as unsupported by science and as violating the first duty of care to our patients.

3. Violation of Duty of Informed Consent: The CPSO is also ordering physicians to violate the sacred duty of informed consent – which is the process by which the patient/public is fully informed of the risks, benefits and any alternatives to the treatment or intervention, before consent is given.

The Nuremberg Code, drafted in the aftermath of the atrocities perpetrated within the Nazi concentration camps – where horrific medical experiments were performed on inmates without consent – expressly forbids the imposition of any kind of intervention without informed consent.

In the case of the lockdown intervention for example, physicians have a fiduciary duty to point out to the public that lockdowns impose their own costs on society, including in greatly increased depression and suicide rates, delayed investigation and treatment of cancer (including delayed surgery, chemotherapy and radiation therapy), ballooning surgical waiting lists (with attendant greatly increased patient suffering) and increased rates of child and domestic abuse.

We physicians believe that with the CPSO statement of 30 April 2021, a watershed moment in the assault on free speech and scientific inquiry has been reached.

By ordering physicians to be silent and follow only one narrative, or else face discipline and censure, the CPSO is asking us to violate our conscience, our professional ethics, the Nuremberg code and the scientific pursuit of truth.

We will never comply and will always put our patients first.

The CPSO must immediately withdraw and rescind its statement of 30 April 2021.

We also give notice to other Canadian and international licensing authorities for physicians and allied professions that the stifling of scientific inquiry and any order to violate our conscience and professional pledge to our patients, itself may constitute a crime against humanity.

¹ College of Physicians and Surgeons of Ontario Statement on Public Health Misinformation (4/30/21). https://twitter.com/cpso_ca/status/1388211577770348544

The College is aware and concerned about the increase of misinformation circulating on social media and other platforms regarding physicians who are publicly contradicting public health orders and recommendations. Physicians hold a unique position of trust with the public and have a professional responsibility to not communicate anti-vaccine, anti-masking, anti-distancing and anti-lockdown statements and/or promoting unsupported, unproven treatments for COVID-19. Physicians must not make comments or provide advice that encourages the

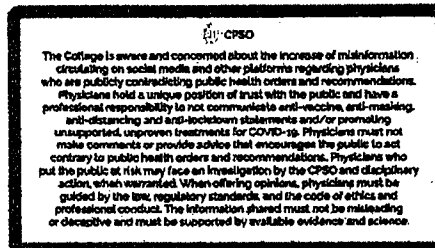
public to act contrary to public health orders and recommendations. Physicians who put the public at risk may face an investigation by the CPSO and disciplinary action, when warranted. When offering opinions, physicians must be guided by the law, regulatory standards, and the code of ethics and professional conduct. The information shared must not be misleading or deceptive and must be supported by available evidence and science.

← Tweet

CPSO
@cpso_ca

CPSO Statement on Public Health Misinformation:
bit.ly/3u9gNDw

Please continue to check our regularly updated COVID-19 resource pages and FAQs for members of the public and physicians: cpso.on.ca/covid-19



3:20 PM · Apr 30, 2021 · Hootsuite Inc.

203 Retweets 457 Quote Tweets 438 Likes

118) **PREDOMINANT ROLE OF BACTERIAL PNEUMONIA AS A CAUSE OF DEATH IN PANDEMIC INFLUENZA: IMPLICATIONS FOR PANDEMIC INFLUENZA PREPAREDNESS.** (follow link for main article)

Abstract

Background

Despite the availability of published data on 4 pandemics that have occurred over the past 120 years, there is little modern information on the causes of death associated with influenza pandemics.

Methods

We examined relevant information from the most recent influenza pandemic that occurred during the era prior to the use of antibiotics, the 1918–1919 “Spanish flu” pandemic. We examined lung tissue sections obtained during 58 autopsies and reviewed pathologic and bacteriologic data from 109 published autopsy series that described 8398 individual autopsy investigations.

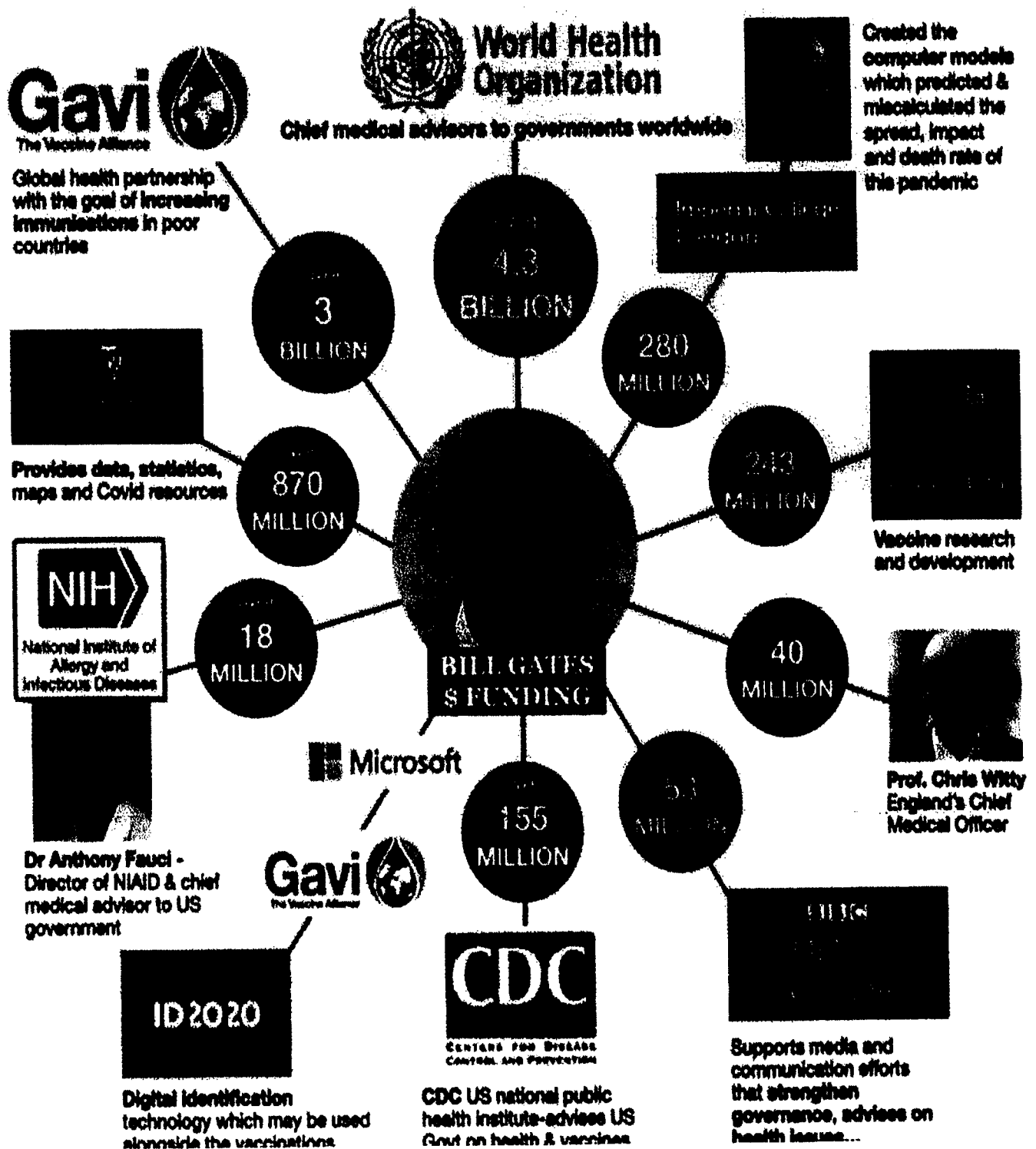
Results

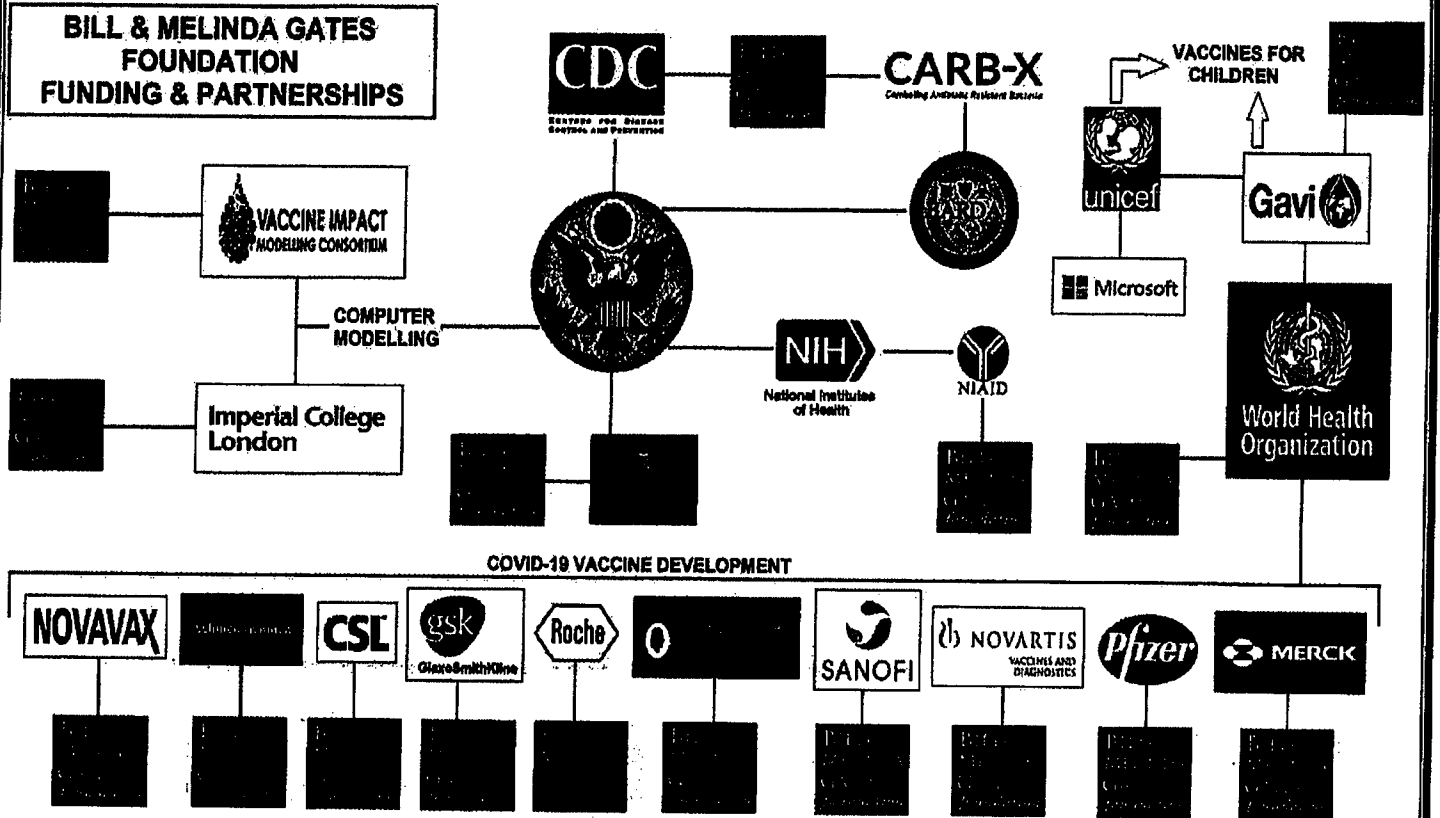
The postmortem samples we examined from people who died of influenza during 1918–1919 uniformly exhibited severe changes indicative of bacterial pneumonia. Bacteriologic and histopathologic results from published autopsy series clearly and consistently implicated secondary bacterial pneumonia caused by common upper respiratory-tract bacteria in most influenza fatalities.

Conclusions

The majority of deaths in the 1918–1919 influenza pandemic likely resulted directly from secondary bacterial pneumonia caused by common upper respiratory-tract bacteria. Less substantial data from the subsequent 1957 and 1968 pandemics are consistent with these findings. If severe pandemic influenza is largely a problem of viral-bacterial copathogenesis, pandemic planning needs to go beyond addressing the viral cause alone (e.g., influenza vaccines and antiviral drugs). Prevention, diagnosis, prophylaxis, and treatment of secondary bacterial pneumonia, as well as stockpiling of antibiotics and bacterial vaccines, should also be high priorities for pandemic planning.

A MAN OF GREAT INFLUENCE...





SOLUTIONS (?)

(the following are references and the stating of such must not be interpreted as medical advice. Readers must assess their own needs under the direct medical supervision of a qualified medical practitioner)

- 1) IVERMECTIN. Ivermectin is a well-known, FDA-approved anti-parasite drug that has been used successfully for more than four decades to treat onchocerciasis "river blindness" and other parasitic diseases. It is one of the safest drugs known. It is on the WHO's list of essential medicines, has been given 3.7 billion times around the globe, and has won the Nobel prize for its global and historic impacts in eradicating endemic parasitic infections in many parts of the world. Our medical discovery of a rapidly growing published medical evidence base, demonstrating ivermectin's unique and highly potent ability to inhibit SARS-CoV-2 replication and to suppress inflammation, prompted our team to use ivermectin for prevention and treatment in all stages of COVID-19. Ivermectin is not yet FDA-approved for the treatment of COVID-19, but on Jan 14, 2021, the NIH changed their recommendation for the use of ivermectin in COVID-19 from "against" to "neutral".
- 2) FRONT LINE COVID-19 CRITICAL CARE ALLIANCE PREVENTION & TREATMENT PROTOCOLS FOR COVID-19.

WHAT CAN I DO?

- 1) Connect with your local MPP. Call him/her. Email him/her. Do something the old fashioned way, write them a personal letter and courier it. Click here to find your MPP by postal code.
https://voterinformation.service.elections.on.ca/en/election/search?mode=postalCode&fbclid=IwAR0aiY6W967PEdlbaKsvpcA8m8PeMFEi8vlgk6mRHsSoewLJcayZW3T_Fc
- 2) Lift The Lockdown
<http://www.liftthelockdown.ca/>

WHAT RECIPIENTS HAVE SAID ABOUT THIS REPORT.

- Cannot express my thanks for your monumental work.
 One could not find enough and sufficient words in any known language to express appreciation for the hard work you have done.
 As Clint Eastwood would say: "You made my day"! (signed VB)
- Wow! Jaye! This thing is growing like a monster!!! Thanks for all the care you and the team have put into this. So glad you took the time to gather and report. Thanks for sending it our way. (signed AJ)
- Hello Jaye, Hope this email finds you well. Thank you for email.
 Your work is much appreciated, a detailed document with all the truth is what people need at the moment. You are doing a wonderful job by pinning the facts. I am conveying your message as much as I can. All I can say is thank you for doing this. Remember you have saved a lot of families by giving the message. _____ speaks highly of you. I am glad she has your guidance, and she will definitely learn a lot. Hope you have good day. God bless. Regards, Dr. NS

- I've learned that the answer to complex situations is often the most simple. In philosophy we call it occam's razor. Believing in some sort of strange conspiracy that people are out to get us is significantly more complex than there's a virus that is running amok that needs to be controlled. (signed, CD)
- Thank you and very good work - Jaye - We are fighting this cause with you - we are going to win...(signed, TM)
- Excellent! This will be so good for me to read. I work in such a conflicted world daily with the medical pressure to take the party line, that vaccines are totally safe and people are just anxiety ridden. I reacted to a Hepatitis B vaccine in Toronto while working and our friend Dr. XXXXXX, told me never to get another vaccine. I was in anaphylactic shock as a 10 year old from a dye for diagnostics/ was told if I ever go into shock again I will die- ~~no hope to save me fast enough.~~ XXXXXX and I are both recovering from getting Covid 19- Variant - so from my research we have now developed broad spectrum natural antibodies- my Doctor says that is so far with studies o it effective for 90 days. I do not want the vaccine- I do not trust the medical line or government. This is a difficult place for me to work in. Thanks for the diligent research. (signed CG)
- Fantastic Jayell "Rescue those being led away to death, and restrain those stumbling toward the slaughter." Prov 24:11. Thank you for doing what God wants and is calling you to do, in this, the darkest hour in Canadian history. Darkest hour not produced by a virus, but by the unprecedented deception and delusion. I have read many pieces on the topic but nothing this professional and comprehensive. Don't quit, don't give up keep on going. We all need more people like you to expose this madness. I would add a little, but pivotal statement to your great work that Canadians need to learn, I learned it the hard way; that **once your freedoms are taken away and gone, nobody will bring them back.** This is the time to push back, or the day might come when there is nothing left to fight for. Very proud of you dear brother. (signed EA)
- I came across this article yesterday morning. Its sad to see people lining up to get their shot to be "safe". I am urging people to read about it before jumping on conclusions. I am astonished to see how these tactics lead by government has killed many lives. **90% of the doctors are not raising awareness but accepting the fact that the media and government is right.** This makes me downhearted because doctors are here to save lives whereas now, in this situation, its the opposite. Looking forward to your next report. Kind regards, Dr. SKN

Your Psalm of Protection

Psalm 91 – God's Prescription for You

I live in the shelter of the Most High
I am under His shadow.

This I declare about the LORD:
He alone is my refuge, my place of safety.
He is my God, and I trust Him.

For He will rescue me from every trap
and protect me from deadly disease.
His faithful promises are my armor and
protection.

I will not be afraid of the terrors of the night,
nor the arrow that flies in the day.

I will not dread the disease that stalks
in darkness,
nor the disaster that strikes at midday.

Though a thousand fall at my side,
though ten thousand are dying around me,
these evils will not touch me.

When I open my eyes,
I see how the wicked are punished.

Because I make the LORD my refuge,
Because I make the Most High my shelter,

No evil will conquer me;
no plague will come near my home.

For He will order His angels
to protect me wherever I go.

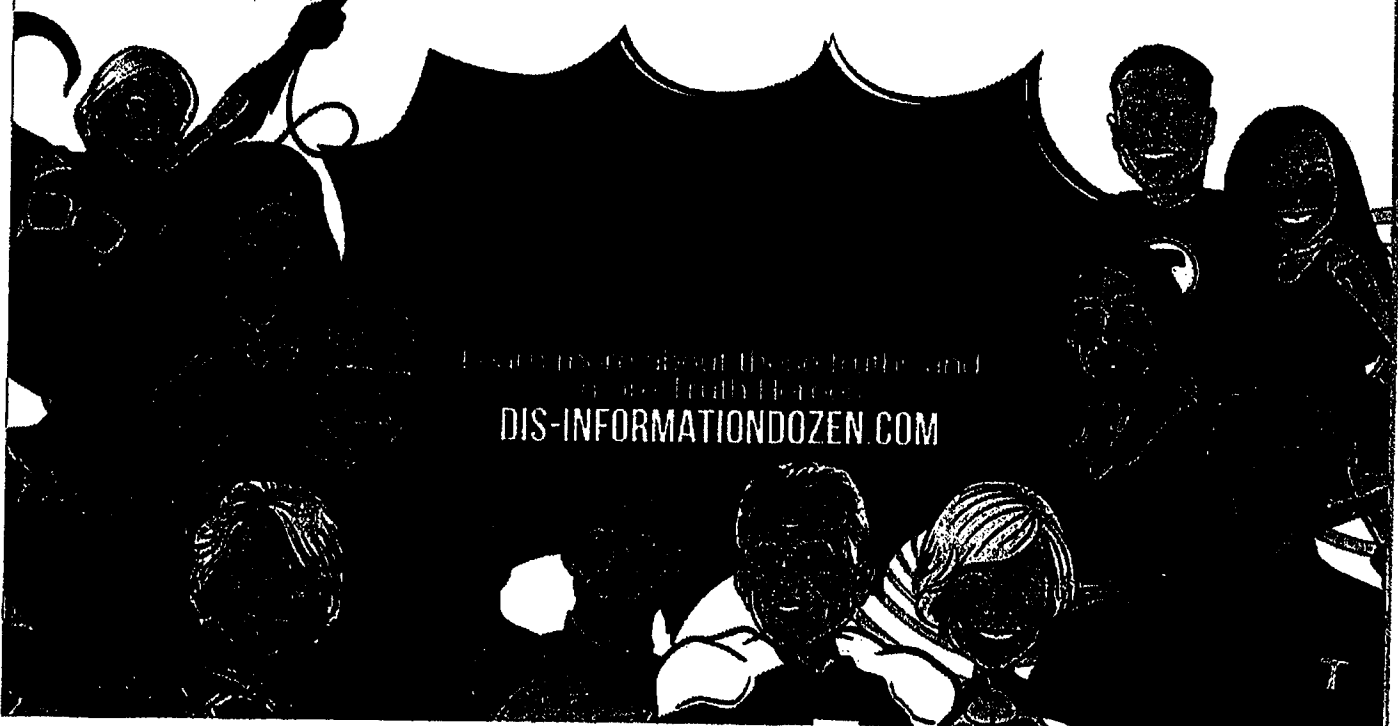
They will hold me up with their hands
so I won't even hurt my foot on a stone.

I'll trample upon lions and cobras;
I'll crush fierce lions and serpents
under my feet!

The LORD says,
"I will rescue those who love Me.
I will protect those who trust in My name.
When they call on Me, I will answer;
I will be with them in trouble.
I will rescue and honor them.
I will reward them with long life
and give them My salvation."

12 VACCINE TRUTHS

1. Vaccine makers (as well as health care professionals and practices who administer vaccines) have **ZERO LEGAL LIABILITY** for injuries or deaths caused by vaccines per the 1986 National Childhood Vaccine Injury Act (NCVIA).
2. The NCVIA was in response to failing vaccine manufacturers overrun with injury and death lawsuits from vaccines, namely DPT.
3. The United States Supreme Court declared vaccines to be "unavoidably unsafe." The Vaccine Injury Compensation Program (VICP) has awarded **MORE THAN \$4,000,000,000** to date, accounting for only a fraction of cases filed and injuries reported.
4. Conflict of interest: The vaccine manufacturers, themselves, are in charge of overseeing the safety studies. They have **ZERO** incentive to call out any safety issues.
5. Multiple vaccines contain human fetal cells (MRC-5 and WI-38) derived from abortions. The full health implications of the use of fetal cell lines in vaccines is unknown.
6. Vaccines contain carcinogenic, mutagenic and neurotoxic ingredients that have not been listed for impairment of fertility. There are no safety studies on synergistic toxicity.
7. There has been an increase of over 1350% in vaccines given to U.S. children from 1962 to today. In lockstep with the increased vaccination schedule, there has been an increase in infant mortality, an explosion of chronic diseases and neurological issues, and an overall decline in the health of our children, especially evident in the last 30 years when the vaccine schedule spiked after liability was removed from vaccine manufacturers (see #1).
8. Vaccine mandates violate bodily autonomy via coercion. Holding education and employment hostage to the consumption of a liability free pharmaceutical is not consent, it is coercion.
9. COVID shots do not meet the traditional definition of a vaccine. They utilize mRNA technology, never before used in humans. Some have reported testing positive for COVID after injection.
10. COVID shots are experimental (due to Emergency Use Authorization), having been tested on human subjects only since Fall 2020. They have not been FDA approved. We now know that safe and effective treatments were censored and smeared by authorities so they could maintain the emergency status for the vaccines.
11. COVID shots have not been shown to prevent disease in the recipient, nor to prevent transmission of infection, which is why the CDC states people still need to wear a mask and social distance.
12. As evidenced by the CDC reporting system, COVID vaccines may have caused deaths in some and severe injuries in many. Mainstream media has not been forthcoming with these reports.



This image shows a single sheet of white paper with horizontal blue or grey ruling lines. The lines are evenly spaced and run across the width of the page. There is no handwriting or other markings on the paper.

Why Face Masks Don't Work: A Revealing Review

October 18, 2016

by John Hardle, BDS, MSc, PhD, FRCDC

Yesterday's Scientific Dogma is Today's Discarded Fable

Introduction

The above quotation is ascribed to Justice Archie Campbell author of Canada's SARS Commission Final Report. ¹ It is a stark reminder that scientific knowledge is constantly changing as new discoveries contradict established beliefs. For at least three decades a face mask has been deemed an essential component of the personal protective equipment worn by dental personnel. A current article, "Face Mask Performance: Are You Protected" gives the impression that masks are capable of providing an acceptable level of protection from airborne pathogens. ² Studies of recent diseases such as Severe Acute Respiratory Syndrome (SARS), Middle Eastern Respiratory Syndrome (MERS) and the Ebola Crisis combined with those of seasonal influenza and drug resistant tuberculosis have promoted a better understanding of how respiratory diseases are transmitted. Concurrently, with this appreciation, there have been a number of clinical investigations into the efficacy of protective devices such as face masks. This article will describe how the findings of such studies lead to a rethinking of the benefits of wearing a mask during the practice of dentistry. It will begin by describing new concepts relating to infection control especially personal protective equipment (PPE).

Trends In Infection Control

For the past three decades there has been minimal opposition to what have become seemingly established and accepted infection control recommendations. In 2009, infection control specialist Dr. D. Diekema questioned the validity of these by asking what actual, front-line hospital-based infection control experiences were available to such authoritative organization as the Centers for Disease Control and Prevention (CDC), the Occupational Safety and Health Association (OSHA) and the National Institute for Occupational Safety and Health (NIOSH). ³ In the same year, while commenting on guidelines for face masks, Dr. M. Rupp of the Society for Healthcare

Epidemiology of America noted that some of the practices relating to infection control that have been in place for decades, "haven't been subjected to the same strenuous investigation that, for instance, a new medicine might be subjected." ⁴ He opined that perhaps it is the relative cheapness and apparent safety of face masks that has prevented them from undergoing the extensive studies that should be required for any quality improvement device. ⁴ More recently, Dr. R. MacIntyre, a prolific investigator of face masks, has forcefully stated that the historical reliance on theoretical assumptions for recommending PPEs should be replaced by rigorously acquired clinical data. ⁵ She noted that most studies on face masks have been based on laboratory simulated tests which quite simply have limited clinical applicability as they cannot account for such human factors as compliance, coughing and talking. ⁵

Covering the nose and mouth for infection control started in the early 1900s when the German physician Carl Flugge discovered that exhaled droplets could transmit tuberculosis. ⁴ The science regarding the aerosol transmission of infectious diseases has, for years, been based on what is now appreciated to be "very outmoded research and an overly simplistic interpretation of the data." ⁶ Modern studies are employing sensitive instruments and interpretative techniques to better understand the size and distribution of potentially infectious aerosol particles. ⁶ Such knowledge is paramount to appreciating the limitations of face masks. Nevertheless, it is the historical understanding of droplet and airborne transmission that has driven the longstanding and continuing tradition of mask wearing among health professionals. In 2014, the nursing profession was implored to "stop using practice interventions that are based on tradition" but instead adopt protocols that are based on critical evaluations of the available evidence. ⁷

A December 2015 article in the National Post seems to ascribe to Dr. Gardam, Director of Infection Prevention and Control, Toronto University Health Network the quote, "I need to choose which stupid, arbitrary infection control rules I'm going to push." ⁸ In a communication with the author, Dr. Gardam explained that this was not a personal belief but that it did reflect the views of some infection control practitioners. In her 2014 article, "Germs and the Pseudoscience of Quality Improvement", Dr. K Sibert, an anaesthetist with an interest in infection control, is of the opinion that many infection control rules are indeed arbitrary, not justified by the available evidence or subjected to controlled follow-up studies, but are devised, often under pressure, to give the appearance of doing something. ⁹

The above illustrate the developing concerns that many infection control measures have been adopted with minimal supporting evidence. To address this fault, the authors of a 2007 New England Journal of Medicine (NEJM) article eloquently argue that all safety and quality improvement recommendations must be subjected to the same rigorous testing as would any new clinical intervention. ¹⁰ Dr. R. MacIntyre, a proponent of this trend in infection control, has used her research findings to boldly state that, "it would not seem justifiable to ask healthcare workers to wear surgical masks." ⁴ To understand this conclusion it is necessary to appreciate the current concepts relating to airborne transmissions.

Airborne Transmissions

Early studies of airborne transmissions were hampered by the fact that the investigators were not able to detect small particles (less than 5 microns) near an infectious person. ⁶ Thus, they assumed that it was the exposure of the face, eyes and nose to large particles (greater than 5 microns) or "droplets" that transmitted the respiratory condition to a person in close proximity to the host. ⁶ This became known as "droplet infection", and 5 microns or greater became established as the size of large particles and the traditional belief that such particles could, in theory, be trapped by a face mask. ⁵ The early researchers concluded that since only large particles were detected near an infectious person any small particles would be transmitted via air currents, dispersed over long distances, remain infective over time and might be inhaled by persons who never had any close contact with the host. ¹¹ This became known as "airborne transmission" against which a face mask would be of little use. ⁵

Through the use of highly sensitive instruments it is now appreciated that the aerosols transmitted from the respiratory tract due to coughing, sneezing, talking, exhalation and certain medical and dental procedures produce respiratory particles that range from the very small (less than 5 microns) to the very large (greater than a 100 microns) and that all of these particles are capable of being inhaled by persons close to the source. ⁶, ¹¹ This means that respiratory aerosols potentially contain bacteria averaging in size from 1-10 microns and viruses ranging in size from 0.004 to 0.1 microns. ¹² It is also acknowledged that upon their emission large "droplets" will undergo evaporation producing a concentration of readily inhalable small particles surrounding the aerosol source. ⁶

The historical terms "droplet infection" and "airborne transmission" defined the routes of infection based on particle size. Current knowledge suggests that these are redundant descriptions since aerosols contain a wide distribution of particle sizes and that they ought to be replaced by the term, "aerosol transmissible." ⁴, ⁵ Aerosol transmission has been defined as "person –to – person transmission of pathogens through air by means of inhalation of infectious particles." ²⁶ In addition, it is appreciated that the physics associated with the production of the aerosols imparts energy to microbial suspensions facilitating their inhalation. ¹¹

Traditionally face masks have been recommended to protect the mouth and nose from the "droplet" route of infection, presumably because they will prevent the inhalation of relatively large particles. ¹¹ Their efficacy must be re-examined in light of the fact that aerosols contain particles many times smaller than 5 microns. Prior to this examination, it is pertinent to review the defence mechanism of the respiratory tract.

Respiratory System Defences

Comprehensive details on the defence mechanisms of the respiratory tract will not be discussed. Instead readers are reminded that; coughing, sneezing, nasal hairs, respiratory tract cilia, mucous producing lining cells and the phagocytic activity of alveolar macrophages provide protection against inhaled foreign bodies including fungi, bacteria and viruses. ¹³ Indeed, the pathogen laden aerosols produced by everyday talking and eating would have the potential to cause significant disease if it were not for these effective respiratory tract defences.

These defences contradict the recently published belief that dentally produced aerosols, "enter unprotected bronchioles and alveoli." ² A pertinent demonstration of the respiratory tract's ability to resist disease is the finding that- compared to controls- dentists had significantly elevated levels of antibodies to influenza A and B and the respiratory syncytial virus. ¹⁴ Thus, while dentists had greater than normal exposure to these aerosol transmissible pathogens, their potential to cause disease was resisted by respiratory immunologic responses. Interestingly, the wearing of masks and eye glasses did not lessen the production of antibodies, thus reducing their significance as personal protective barriers. ¹⁴ Another example of the effectiveness of respiratory defences is that although exposed to more aerosol transmissible pathogens than the general population, Tokyo dentists have a significantly lower risk of dying from pneumonia and bronchitis. ¹⁵ The ability of a face mask to prevent the infectious risk potentially inherent in sprays of blood and saliva reaching the wearers mouth and nose is questionable since, before the advent of mask use, dentists were no more likely to die of infectious diseases than the general population. ¹⁶

The respiratory tract has efficient defence mechanisms. Unless face masks have the ability to either enhance or lessen the need for such natural defences, their use as protection against airborne pathogens must be questioned.

Face Masks

History: Cloth or cotton gauze masks have been used since the late 19th century to protect sterile fields from spit and mucous generated by the wearer. ^{5,17,18} A secondary function was to protect the mouth and nose of the wearer from the sprays and splashes of blood and body fluids created during surgery. ¹⁷ As noted above, in the early 20th century masks were used to trap infectious "droplets" expelled by the wearer thus possibly reducing disease transmission to others. ¹⁸ Since the mid-20th century until to-day, face masks have been increasingly used for entirely the opposite function: that is to prevent the wearer from inhaling respiratory pathogens. ^{5,20,21} Indeed, most current dental infection control recommendations insist that a face mask be worn, "as a key component of personal protection against airborne pathogens". ²

Literature reviews have confirmed that wearing a mask during surgery has no impact whatsoever on wound infection rates during clean surgery. ^{22,23,24,25,26} A recent 2014 report states categorically that no clinical trials have ever shown that wearing a mask prevents contamination of surgical sites. ²⁶ With their original purpose being highly questionable it should be no surprise that the ability of face masks to act as respiratory protective devices is now the subject of intense scrutiny. ²⁷ Appreciating the reasons for this, requires an understanding of the structure, fit and filtering capacity of face masks.

Structure and Fit: Disposable face masks usually consist of three to four layers of flat non-woven mats of fine fibres separated by one or two polypropylene barrier layers which act as filters capable of trapping material greater than 1 micron in diameter. ^{18,24,28} Masks are placed over the nose and mouth and secured by straps usually placed behind the head and neck. ²¹ No matter how well a mask conforms to the shape of a person's face, it is not designed to create an air tight seal around the face. Masks will always fit fairly loosely with considerable gaps along the cheeks,

around the bridge of the nose and along the bottom edge of the mask below the chin. **21** These gaps do not provide adequate protection as they permit the passage of air and aerosols when the wearer inhales. **11,17** It is important to appreciate that if masks contained filters capable of trapping viruses, the peripheral gaps around the masks would continue to permit the inhalation of unfiltered air and aerosols. **11**

Filtering Capacity: The filters in masks do not act as sieves by trapping particles greater than a specific size while allowing smaller particles to pass through. **18** Instead the dynamics of aerosolized particles and their molecular attraction to filter fibres are such that at a certain range of sizes both large and small particles will penetrate through a face mask. **18** Accordingly, it should be no surprise that a study of eight brands of face masks found that they did not filter out 20-100% of particles varying in size from 0.1 to 4.0 microns. **21** Another investigation showed penetration ranges from 5-100% when masks were challenged with relatively large 1.0 micron particles. **29** A further study found that masks were incapable of filtering out 80-85% of particles varying in size from 0.3 to 2.0 microns. **30** A 2008 investigation identified the poor filtering performance of dental masks. **27** It should be concluded from these and similar studies that the filter material of face masks does not retain or filter out viruses or other submicron particles. **11,31** When this understanding is combined with the poor fit of masks, it is readily appreciated that neither the filter performance nor the facial fit characteristics of face masks qualify them as being devices which protect against respiratory infections. **27** Despite this determination the performance of masks against certain criteria has been used to justify their effectiveness.² Accordingly, it is appropriate to review the limitations of these performance standards.

Performance Standards: Face masks are not subject to any regulations. **11** The USA Federal Food and Drug Administration (FDA) classifies face masks as Class II devices. To obtain the necessary approval to sell masks all that a manufacturer need do is satisfy the FDA that any new device is substantially the same as any mask currently available for sale. **21** As ironically noted by the Occupational Health and Safety Agency for Healthcare in BC, "There is no specific requirement to prove that the existing masks are effective and there is no standard test or set of data required supporting the assertion of equivalence. Nor does the FDA conduct or sponsor testing of surgical masks." **21** Although the FDA recommends two filter efficiency tests; particulate filtration efficiency (PFE) and bacterial filtration efficiency (BFE) it does not stipulate a minimum level of filter performance for these tests. **27** The PFE test is a basis for comparing the efficiency of face masks when exposed to aerosol particle sizes between 0.1 and 5.0 microns. The test does not assess the effectiveness of a mask in preventing the ingress of potentially harmful particles nor can it be used to characterize the protective nature of a mask. **32** The BFE test is a measure of a mask's ability to provide protection from large particles expelled by the wearer. It does not provide an assessment of a mask's ability to protect the wearer. **17** Although these tests are conducted under the auspices of the American Society of Testing and Materials (ASTM) and often produce filtration efficiencies in the range of 95-98 %, they are not a measure of a masks ability to protect against respiratory pathogens. Failure to appreciate the limitations of these tests combined with a reliance on the high filtration efficiencies reported by the manufacturers has, according to Healthcare in BC, "created an environment in which health care

workers think they are more protected than they actually are." **21** For dental personnel the protection sought is mainly from treatment induced aerosols.

Dental Aerosols

For approximately 40 years it has been known that dental restorative and especially ultrasonic scaling procedures produce aerosols containing not only blood and saliva but potentially pathogenic organisms. **33** The source of these organisms could be the oral cavities of patients and/or dental unit water lines. **34** Assessing the source and pathogenicity of these organisms has proven elusive as it is extremely difficult to culture bacteria especially anaerobes and viruses from dental aerosols. **34** Although there is no substantiated proof that dental aerosols are an infection control risk, it is a reasonable assumption that if pathogenic microbes are present at the treatment site they will become aerosolized and prone to inhalation by the clinician which a face mask will not prevent. As shown by the study of UK dentists, the inhalation resulted in the formation of appropriate antibodies to respiratory pathogens without overt signs and symptoms of respiratory distress. **14** This occurred whether masks were or were not worn. In a 2008 article, Dr. S. Harrel, of the Baylor College of Dentistry, is of the opinion that because there is a lack of epidemiologically detectable disease from the use of ultrasonic scalers, dental aerosols appear to have a low potential for transmitting disease but should not be ignored as a risk for disease transmission. **34** The most effective measures for reducing disease transmission from dental aerosols are pre-procedural rinses with mouthwashes such as chlorhexidine, large diameter high volume evacuators, and rubber dam whenever possible. **33** Face masks are not useful for this purpose, and Dr. Harrel believes that dental personnel have placed too great a reliance on their efficacy. **34** Perhaps this has occurred because dental regulatory agencies have failed to appreciate the increasing evidence on face mask inadequacies.

The Inadequacies

Between 2004 and 2016 at least a dozen research or review articles have been published on the inadequacies of face masks. **5,6,11,17,19,20,21,25,26,27,28,31** All agree that the poor facial fit and limited filtration characteristics of face masks make them unable to prevent the wearer inhaling airborne particles. In their well-referenced 2011 article on respiratory protection for healthcare workers, Drs. Harriman and Brosseau conclude that, "facemasks will not protect against the inhalation of aerosols." **11** Following their 2015 literature review, Dr. Zhou and colleagues stated, "There is a lack of substantiated evidence to support claims that facemasks protect either patient or surgeon from infectious contamination." **25** In the same year Dr. R. MacIntyre noted that randomized controlled trials of facemasks failed to prove their efficacy. **5** In August 2016 responding to a question on the protection from facemasks the Canadian Centre for Occupational Health and Safety replied:

- The filter material of surgical masks does not retain or filter out submicron particles;
- Surgical masks are not designed to eliminate air leakage around the edges;
- Surgical masks do not protect the wearer from inhaling small particles that can remain airborne for long periods of time. **31**

In 2015, Dr. Leonie Walker, Principal Researcher of the New Zealand Nurses Organization succinctly described- within a historical context – the inadequacies of facemasks, “Health care workers have long relied heavily on surgical masks to provide protection against influenza and other infections. Yet there are no convincing scientific data that support the effectiveness of masks for respiratory protection. The masks we use are not designed for such purposes, and when tested, they have proved to vary widely in filtration capability, allowing penetration of aerosol particles ranging from four to 90%.” **35**

Face masks do not satisfy the criteria for effectiveness as described by Drs. Landefeld and Shojania in their NEJM article, “The Tension between Needing to Improve Care and Knowing How to Do It.” **10** The authors declare that, “...recommending or mandating the widespread adoption of interventions to improve quality or safety requires rigorous testing to determine whether, how, and where the intervention is effective...” They stress the critical nature of this concept because, “...a number of widely promulgated interventions are likely to be wholly ineffective, even if they do not harm patients.” **10** A significant inadequacy of face masks is that they were mandated as an intervention based on an assumption rather than on appropriate testing.

Conclusions

The primary reason for mandating the wearing of face masks is to protect dental personnel from airborne pathogens. This review has established that face masks are incapable of providing such a level of protection. Unless the Centers for Disease Control and Prevention, national and provincial dental associations and regulatory agencies publically admit this fact, they will be guilty of perpetuating a myth which will be a disservice to the dental profession and its patients. It would be beneficial if, as a consequence of the review, all present infection control recommendations were subjected to the same rigorous testing as any new clinical intervention. Professional associations and governing bodies must ensure the clinical efficacy of quality improvement procedures prior to them being mandated. It is heartening to know that such a trend is gaining a momentum which might reveal the inadequacies of other long held dental infection control assumptions. Surely, the hallmark of a mature profession is one which permits new evidence to trump established beliefs. In 1910, Dr. C. Chapin, a public health pioneer, summarized this idea by stating, “We should not be ashamed to change our methods; rather, we should be ashamed not to do so.” **36** Until this occurs, as this review has revealed, dentists have nothing to fear by unmasking. **OH**

Oral Health welcomes this original article.

References

1. Ontario Ministry of Health and Long-term Care. SARS Commission-Spring of Fear: Final Report. Available at: http://www.health.gov.on.ca/english/public/pub/ministry_reports/campbell06/campbell06.html
2. Molinari JA, Nelson P. Face Mask Performance: Are You Protected? Oral Health, March 2016.

3. Diekema D. Controversies in Hospital Infection Prevention, October, 2009.
4. Unmasking the Surgical Mask: Does It Really Work? Medpage Today, Infectious Disease, October, 2009.
5. MacIntyre CR, Chughtai AA. Facemasks for the prevention of infection in healthcare and community settings. BMJ 2015; 350:h694.
6. Brosseau LM, Jones R. Commentary: Health workers need optimal respiratory protection for Ebola. Center for Infectious Disease Research and Policy. September, 2014.
7. Clinical Habits Die Hard: Nursing Traditions Often Trump Evidence-Based Practice. Infection Control Today, April, 2014.
8. Landman K. Doctors, take off those dirty white coats. National Post, December 7, 2015.
9. Sibert K. Germs and the Pseudoscience of Quality Improvement. California Society of Anesthesiologists, December 8, 2014.
10. Auerbach AD, Landfeld CS, Shojania KG. The Tension between Needing to Improve Care and Knowing How to Do It. NEJM 2007; 357 (6):608-613.
11. Harriman KH, Brosseau LM. Controversy: Respiratory Protection for Healthcare Workers. April, 2011. Available at: http://www.medscape.com/viewarticle/741245_print
12. Bacteria and Viruses Issues. Water Quality Association, 2016. Available at: <https://www.wqa.org/Learn-About-Water/Common-Contaminants/Bacteria-Viruses>
13. Lechtzin N. Defense Mechanisms of the Respiratory System. Merck Manuals, Kenilworth, USA, 2016
14. Davies KJ, Herbert AM, Westmoreland D, Bagg J. Seroepidemiological study of respiratory virus infections among dental surgeons. Br Dent J. 1994; 176(7):262-265.
15. Shimpo H, Yokoyama E, Tsurumaki K. Causes of death and life expectancies among dentists. Int Dent J 1998; 48(6):563-570.
16. Bureau of Economic Research and Statistics, Mortality of Dentists 1961-1966. JADA 1968; 76(4):831-834.
17. Respirators and Surgical Masks: A Comparison. 3 M Occupational Health and Environment Safety Division. Oct. 2009.
18. Brosseau L. N95 Respirators and Surgical Masks. Centers for Disease Control and Prevention. Oct. 2009.
19. Johnson DF, Druce JD, Birch C, Grayson ML. A Quantitative Assessment of the Efficacy of Surgical and N95 Masks to Filter Influenza Virus in Patients with Acute Influenza Infection. Clin Infect Dis 2009; 49:275-277.
20. Weber A, Willeke K, Marchlioni R et al. Aerosol penetration and leakage characteristics of masks used in the health care industry. Am J Inf Cont 1993; 219(4):167-173.
21. Yassi A, Bryce E. Protecting the Faces of Health Care Workers. Occupational Health and Safety Agency for Healthcare in BC, Final Report, April 2004.
22. Bahli ZM. Does Evidence Based Medicine Support The Effectiveness Of Surgical Facemasks In Preventing Postoperative Wound Infections In Elective Surgery. J Ayub Med Coll Abbottabad 2009; 21(2)166-169.
23. Lipp A, Edwards P. Disposable surgical face masks for preventing surgical wound infection in clean surgery. Cochrane Database Syst Rev 2002(1) CD002929.
24. Lipp A, Edwards P. Disposable surgical face masks: a systematic review. Can Oper

Room Nurs J 2005; 23(#):20-38.

25. Zhou Cd, Sivathondan P, Handa A. Unmasking the surgeons: the evidence base behind the use of facemasks in surgery. JR Soc Med 2015; 108(6):223-228.

26. Brosseau L, Jones R. Commentary: Protecting health workers from airborne MERS-CoV- learning from SARS. Center for Infectious Disease Research and Policy May 2014.

27. Oberg T, Brosseau L. Surgical mask filter and fit performance. Am J Infect Control 2008; 36:276-282.

28. Lipp A. The effectiveness of surgical face masks: what the literature shows. Nursing Times 2003; 99(39):22-30.

29. Chen CC, Lehtimaki M, Willeke K. Aerosol penetration through filtering facepieces and respirator cartridges. Am Indus Hyg Assoc J 1992; 53(9):566-574.

30. Chen CC, Willeke K. Characteristics of Face Seal Leakage in Filtering Facepieces. Am Indus Hyg Assoc J 1992; 53(9):533-539.

31. Do surgical masks protect workers? OSH Answers Fact Sheets. Canadian Centre for Occupational health and Safety. Updated August 2016.

32. Standard Test Method for Determining the Initial Efficiency of Materials Used in Medical Face Masks to Penetration by Particulates Using Latex Spheres. American Society of Testing and Materials, Active Standard ASTM F2299/F2299M.

33. Harrel SK. Airborne Spread of Disease-The Implications for Dentistry. CDA J 2004; 32(11); 901-906.

34. Harrel SK. Are Ultrasonic Aerosols an Infection Control Risk? Dimensions of Dental Hygiene 2008; 6(6):20-26.

35. Robinson L. Unmasking the evidence. New Zealand Nurses Organization. May 2015. Available at: <https://nznoblog.org.nz/2015/05/15/unmasking-the-evidence>

36. Chapin CV. The Sources and Modes of Transmission. New York, NY: John Wiley & Sons; 1910.

Face Masks and Children:

There is no research to date on the safety of face masks for children worn for prolonged periods of time. There have been some recent reports of harm in addition to child deaths who were wearing face masks while engaging in physical activity:

- In Germany, two 13-year-old children died suddenly while wearing a mask for a prolonged period of time; autopsies couldn't exclude CO2 intoxication or a sudden cardiac arrest.
- In China, several children who had to wear a mask during sports classes fainted and died; the autopsies found a sudden cardiac arrest as the probable cause of death.

Source: <https://swprsr.org/face-masks-evidence/>

Psychological Damage in Children (September 11, 2020).

<https://www.world-today-news.com/70-doctors-in-open-letter-to-ben-weyts-abolish-mandatory-mouth-mask-at-school-belgium/>

- 70 Belgian doctors begged for cancellation of mask mandate at school. "In recent months, the general well-being of children and young people has come under severe pressure. We see in our practices an increasing number of children and young people with complaints due to the rules of conduct that have been imposed on them. We diagnose anxiety and sleep problems, behavioral disorders and fear of contamination. We are seeing an increase in domestic violence, isolation and deprivation. Many lack physical and emotional contact; attachment problems and addiction are obvious. **'The mandatory mouth mask in schools is a major threat to their development. It ignores the essential needs of the growing child. The well-being of children and young people is highly dependent on the emotional connection with others. (...)** The aim of education is to create an optimal context so that a maximum development of young people is possible. The school environment must be a safe practice field. **The mouth mask obligation, on the other hand, makes the school a threatening and unsafe environment, where emotional connection becomes difficult. 'In addition, there is no large-scale evidence that wearing face masks in a non-professional environment has any positive effect on the spread of viruses, let alone on general health.'**
- Recent study (in German) cultured 82 bacterial colonies & 4 mold (fungoid) colonies from a child's masks after 8 hours of wear.
- Reuse of cloth masks, frequency and effectiveness of cleaning, and poor filtration may result in increased risk of infection. World Health Organization (WHO), June 2020
- "The disadvantages of the use of mask by healthy people in the general public include:
 - increased risk of self-contamination due to the manipulation of a face mask and subsequently touching eyes with contaminated hands;
 - potential self-contamination that can occur if non- medical masks are not changed when wet or soiled, which increase likelihood of microorganisms to reproduce;
 - potential headache and/or breathing difficulties, depending on type of mask used;
 - development of facial skin lesions, irritant dermatitis or worsening acne, when used frequently for long hours;

- difficulty with communicating clearly;
- discomfort;
- a false sense of security, leading to potentially lower adherence to other critical preventive measures such as physical distancing and hand hygiene;
- waste management issues; improper mask disposal leading to increased litter in public places, risk of contamination to street cleaners and environment hazard;
- difficulty communicating for deaf persons who rely on lip reading;
- discomfort and difficulty wearing masks, especially for children, developmentally challenged persons, those with mental illness, elderly persons with cognitive impairment, those with asthma or chronic respiratory or breathing problems, those who have had facial trauma or recent oral maxillofacial surgery, and those living in hot and humid environments.

Above information from following source: https://aapsonline.org/mask-facts/?fbclid=IwAR25_h2smQ-8WNreLefaaVKOCYYBbN3qyG8Zddir1XEipID9LpAtUpAZFh8

Even surgeons SHOULDN'T wear face masks! Clinical trial research found 50% MORE patient infections among surgeons wearing masks compared to surgeons not wearing a mask! <https://pubmed.ncbi.nlm.nih.gov/1853618/>

Additional information related to children and face masks, please see articles below:

<https://thehill.com/opinion/education/514742-masks-for-all-children-arent-needed-or-ethical>

<https://swprsr.org/face-masks-evidence/>

Research on Effectiveness of Face Masks:

<https://www.sciencedaily.com/releases/2015/04/150422121724.htm>

<https://pubmed.ncbi.nlm.nih.gov/25903751/>

<https://pubmed.ncbi.nlm.nih.gov/18500410/>

<https://pubmed.ncbi.nlm.nih.gov/33254499/>

<https://www.nejm.org/doi/full/10.1056/NEJMp2006372>

May 18, 2021

Masks: Scientific Articles on Mask Effectiveness for Preventing Infection Spread

Statement: *"No clear correlation exists to prove the effectiveness of masks to prevent infection or prevent the spread of infection. Show me DATA, not opinion articles from so-called experts at medical schools dependent on federal grants for research."*

British Medical Journal: <https://bmjopen.bmj.com/content/5/4/e006577>

"The blaming any viral infection on not wearing masks remains pseudoscience: the only published randomized clinical study of cloth masks shows 97% penetration of particles & higher infection rate than control. But never mind, it's all about submission...and control."

New England Journal of Medicine: <https://www.nejm.org/doi/full/10.1056/NEJMp2006372>

"We know that wearing a mask outside health care facilities offers little, if any, protection from infection. ...the chance of catching Covid-19 from a passing interaction in a public space is therefore minimal. In many cases, the desire for widespread masking is a reflexive reaction to anxiety over the pandemic."

Article: <https://arxiv.org/ftp/arxiv/papers/2005/2005.10720.pdf>

"...surgical and handmade masks, and face shields, generate significant leakage jets that have the potential to disperse virus-laden fluid particles by several meters.They all showed in intense backward jet for heavy breathing and coughing conditions. It is important to be aware of this jet, to avoid a false sense of security that may arise when standing to the side of, or behind, a person wearing a surgical, or handmade mask, or shield."

Article: <https://pubmed.ncbi.nlm.nih.gov/32232837/>

"Most health care workers develop de novo PPE associated headaches or exacerbation of their pre-existing headache disorders."

Article: <https://www.cambridge.org/core/services/aop-cambridge-core/content/view/64D368496EBDE0AFCC6639CCC9D8BC05/S0950268809991658a.pdf/face-masks-to-prevent-transmission-of-influenza-virus-a-systematic-review.pdf>

"There is little evidence to support the effectiveness of face masks to reduce the risk of infection."

British Medical Journal: <https://www.bmj.com/content/369/bmj.m1435>

"...laboratory-confirmed viral infections were significantly higher in the cloth mask group. Virus particle penetration was almost 97%. ...the results caution against the use of cloth masks.. Moisture retention, reuse of cloth masks, and poor filtration may result in increased risk of infection."

Article: <https://arxiv.org/ftp/arxiv/papers/2005/2005.10720.pdf>

"...surgical and handmade masks, and face shields, generate significant leakage jets that have the potential to disperse virus-laden fluid particles by several meters.They all showed an intense backward jet for heavy breathing and coughing conditions. It is important to be aware of this jet to avoid a false sense of security that may arise when standing to the side of, or behind, a person wearing a surgical, or handmade mask, or shield."

JAMA (Journal of the American Medical

Association): <https://jamanetwork.com/journals/jama/fullarticle/2762694>

"Face masks should not be worn by healthy individuals to protect themselves from acquiring respiratory infection because there is no evidence to suggest that face masks worn by healthy individuals are effective in preventing people from becoming ill."

Article: <https://pubmed.ncbi.nlm.nih.gov/19216002/>

"Face mask use in health care workers has not been demonstrated to provide benefit in terms of cold symptoms or getting colds."

Article: <https://pubmed.ncbi.nlm.nih.gov/22188875/>

**Meta analysis of multiple studies on using masks to prevent infection using N95 masks and respirators which are far superior to disposable or cloth masks. "None of the studies established a conclusive relationship between mask/respirator use and protection against influenza infection."*

Article: <https://www.acpjournals.org/doi/10.7326/M20-1342>

"...both surgical and cotton masks seem to be ineffective in preventing the dissemination of SARS-CoV-2 from the coughs of patients with COVID-19 to the environment and external mask surface."

NOTE: Respiratory acidosis is clinically dangerous, It can lead to also polyuria, urinary acidosis, kidney damage, and hypercapnia. The stress response from lowered oxygen causes cortisol to rise, potentially so, which lowers immune vigilance increasing infection risk.

Article: <https://www.medicalnewstoday.com/articles/313110>

"Respiratory acidosis develops when air into and exhaled from the lungs does not get adequately exchanged between the carbon dioxide from the body and oxygen from the air."

Also note: Deoxygenation is clinically dangerous and not only leads to and/or exacerbates headache disorders, a hypoxic state can create and/or activate malignant cells within 48 hours. Acidosis also leads to increased cancer risk. (Note article above on respiratory acidosis) This is old work from Otto Warburg himself.

Article: <https://pubmed.ncbi.nlm.nih.gov/32232837/>

"Most health care workers develop de novo PPE-associated headaches or exacerbation of their pre-existing headache disorders."

The meta-analysis is the most reliable data set as the reproducibility of results is scientifically so powerful.

Behold: Long, Y. et al. (2020) "Effectiveness of N95 respirators versus surgical masks against influenza: A systematic review and meta-analysis," J Evid Based Med. 2020; 1-

9. <https://onlinelibrary.wiley.com/doi/epdf/10.1111/jebm.12381>

"A total of six randomized contrail led trials (RCTs) involving 9,171 participants were included. There were no statistically significant differences in preventing laboratory-confirmed influenza, laboratory-confirmed respiratory viral infections, laboratory-confirmed respiratory infection, and influenza-like illness using N95 respirators and surgical masks. Meta-analysis indicated a protective effect of N95 respirators against laboratory-confirmed bacterial colonization (RR = 0.58, 95% CI 0.43-0.78). The use of N95 respirators compared with surgical masks is not associated with a lower risk of laboratory-confirmed influenza."

NOTE: The article above referred to users of N95 masks and respirators which are superior to disposable medical masks and cloth masks for particle filtration, this include virus and bacteria.

Meta-analysis of 17 studies: <https://onlinelibrary.wiley.com/doi/epdf/10.1111/j.1750-2659.2011.00307.x>

Key points: *"There is little evidence to support the effectiveness of face masks to reduce the risk of infection."* and *"None of the studies established a conclusive relationship between mask/respirator use and protection against influenza infection."*

A 2017 meta-analysis of 23 studies and six controlled trials: This analysis found, as did a recent 2020 analysis, that yet again there was bias in studies that claimed masks provide protective benefits. This analysis removed the bias and concluded that masks are not effective: *"Self-reported assessment of clinical outcomes was prone to bias. Evidence of a protective effect of masks or respirators against verified respiratory infection (VRI) was not statistically significant."* Article: <https://www.cmai.ca/content/188/8/567>

Even in May 2020 the **CDC** (yes, the CDC) published an analysis of several studies that notes the **ineffectiveness** of hand washing and mask wearing for prevention of influenza infection and transmission. Article: https://wwwnc.cdc.gov/eid/article/26/5/19-0994_article

From the CDC, again: cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/face-masks.html

"Available evidence shows that (cloth masks) may even increase the risk of infection due to moisture, liquid diffusion, and retention of the virus. Penetration of particles through cloth is reported to be high. Altogether, common fabric cloth masks are not considered protective against respiratory viruses and their use should not be encouraged."

This scientific analysis of numerous publications by four authors on mask ineffectiveness has stood since 2011: www.ncbi.nlm.nih.gov/pmc/articles/PMC5779801/

"None of the studies established a conclusive relationship between mask/respirator use and protection against influenza infection."

The C-19 pandemic is about viral transmission. Surgical and cloth masks do nothing to prevent viral transmission. We should all realize by now that face masks have never been shown to prevent or protect against viral transmission in ANY study. This is exactly why masks have never been recommended for use during the seasonal flu outbreak, epidemics, or previous pandemics.

Top EU health officials also agree that masks are pseudoscientific: <https://fee.org/articles/europes-top-health-officials-say-masks-arent-helpful-in-beating-covid-19/>

Dr. Dennis Rancourt – May 20, 2020 – A Ph.D from University of Toronto (1984), and is a former professor of physics.

DOI: [10.13140/RG.2.2.14320.40967/1](https://doi.org/10.13140/RG.2.2.14320.40967/1)

Abstract

"Masks and respirators do not work. There have been extensive randomized controlled trial (RCT) studies, and meta-analysis reviews of RCT studies, which all show that masks and respirators do not work to prevent respiratory influenza-like illnesses, or respiratory illnesses believed to be transmitted by droplets and aerosol particles. Furthermore, the relevant known physics and biology, which I review, are such that masks and respirators should not work. It would be a paradox if masks and respirators worked, given what we know about viral respiratory diseases: The main transmission path is long-residence-time aerosol particles ($< 2.5 \mu\text{m}$), which are too fine to be blocked, and the minimum-infective-dose is smaller than one aerosol particle. The present paper about masks illustrates the degree to which governments, the mainstream media, and institutional propagandists can decide to operate in a science vacuum, or select only incomplete science that serves their interests. Such recklessness is also certainly the case with the current global lockdown of over 1 billion people, an unprecedented experiment in medical and political history."

[Download full report PDF](#) (requires a Research Gate account)

Face Masks Pose Serious Risks to the Healthy by Dr. Russell

Blaylock: <https://www.technocracy.news/blaylock-face-masks-pose-serious-risks-to-the-healthy/?print=pdf>

If the previous link doesn't work use this one: https://fort-russ.com/2020/05/dr-blaylock-face-masks-pose-serious-risks-to-the-healthy-hypoxia-and-hypercapnia/?fbclid=IwAR30E-daO1VSrMy19NucgXLCsCJguVOPhWc_cqtC8ers_21aLqjSovQSndc

Comprehensive analysis of 50 states shows greater spread of COVID-19 with mask mandates: December 21, 2020 by Daniel Horowitz

https://www.theblaze.com/op-ed/horowitz-comprehensive-analysis-of-50-states-shows-greater-spread-with-mask-mandates?utm_source=theblaze-breaking&utm_medium=email&utm_campaign=20201221Trending-

HorowitzMaskMandates&utm_term=ACTIVE%20LIST%20-%20TheBlaze%20Breaking%20News

SUMMARY: COVID cases were LOWER in US states and counties that did NOT mandate masks compared to places where masks WERE mandated.

Anthony Fauci on 60 Minutes: Masks do not reduce spread/risk of infection (video): https://youtu.be/PRa6t_e7dgl

[illegible]

A classic fallacious argument: "If masks don't work, then why do surgeons wear them?"

Surgeons in one of Sweden's top hospitals did serious trials on them and stopped wearing them. Their tests showed no value from them. Those maverick Swedes...no wonder they won the pandemic with facts and wisdom. <https://link.springer.com/article/10.1007/BF01658736>

If a surgeon were sick, especially with a viral infection, they would not perform surgery as they know the virus would NOT be stopped by their surgical mask.

Another area of "false equivalence" has to do with the environment in which the masks are worn. The environments in which surgeons wear masks minimize the adverse effects surgical masks have on their wearers. (*supplemental oxygen, positive pressure room, highly filtered air*)

[illegible]

Book about Dr. Fauci: *Anthony Fauci, The Bernie Madoff of Science:*

Fauci, The Bernie Madoff of Science and the HIV Ponzi Scheme that Concealed the Chronic Fatigue Syndrome Epidemic

https://www.amazon.com/dp/B088P9KMR6/ref=cm_sw_r_cp_tai_GXPZNECM1Z0N3XDVXSFG

NOTE TO COMMISSIONERS, MEMBERS OF CCSD, COLLEGES, UNIVERSITIES: On behalf of students at your institutions, you should feel compelled to review this document, provide the requisite information/ answers to any requirement that students get a Covid-19 emergency use authorization (EUA) experimental vaccine.

1) If a student is required or encouraged to receive an EUA Covid-19 injection, does the school's health insurance plan or indemnity insurance policy provide complete coverage should a student experience an adverse event, or even death?

2) For students at your institution, will you provide any other medical or financial support to me or my family if any student experiences an adverse event to an EUA Covid-19 injection and is unable to attend school for days, weeks, or months, or if the student is disabled for life?

3) The Food and Drug Administration (FDA) requires that EUA vaccine recipients be provided with certain vaccine-specific information to help them or their parents/guardians make an informed decision about vaccination.⁹ The EUA fact sheets that must be provided are specific to each authorized Covid-19 injection and are developed by the manufacturers of the injections (Pfizer/ BioNTech, Moderna, Oxford/AstraZeneca, and the Johnson & Johnson subsidiary Janssen). The fact sheets must provide the most current and up-to-date information on the injections, and vaccine recipients must also receive information about adverse events. Have you read, understood, and provided (parents and all students) with these fact sheets and with current information on adverse events so that I/we can make an educated decision?

4) Have you reviewed the available databases of material adverse events reported to date for people who have received experimental Covid-19 injections?^{10,11,12,13} Potential and reported adverse events include death, anaphylaxis, neurological disorders, autoimmune disorders, other long-term chronic diseases, blindness and deafness, infertility, fetal damage, miscarriage, and stillbirth.

5) The FDA's guidance¹⁴ on emergency use authorization of medical products requires the FDA to "ensure that recipients are informed to the extent practicable given the applicable circumstances... that they have the option to accept or refuse the EUA product...." **Are you aware of this statement? Have you informed all students that they have the option to refuse?**

6) With respect to the emergency use of an unapproved product, the Federal Food, Drug and Cosmetic Act, Title 21 U.S.C. 360bbb-3(e)(1)(A)(ii)(I-III)¹⁵ reiterates that individuals be informed of "the **option to accept or refuse administration of the product**, [and] of the consequences, if any, of refusing administration of the product, and of the alternatives to the product that are available and of their benefits and risks." If experimental EUA Covid-19 vaccines are ever approved by the FDA, state legislation would be required to allow companies to mandate the Covid-19 injections. **Are you aware of these facts?**

7) EUA products are unapproved, unlicensed, and experimental. Under the Nuremberg Code—the foundation of ethical medicine—no one may be coerced to participate in a medical experiment. The individual's consent is absolutely essential. No court has ever upheld a mandate for an EUA vaccine. In *Doe #1 v. Rumsfeld*, 297 F. Supp. 2d 119 (2003),¹⁶ a federal court held that the U.S. military could not mandate EUA vaccines for soldiers: "...[T]he United States cannot demand that members of the armed forces also serve as guinea pigs for experimental drugs" (*Id.* at 135). **Are you aware of this?**

8) The United States Code of Federal Regulations¹⁷ and the FDA require the informed consent of human subjects for medical research. The EUA Covid-19 injections are unapproved, unlicensed, investigational vaccines that are still in their experimental stage. It is unlawful to conduct medical research on a human being, even in the event of an emergency, unless steps are taken to secure the **informed consent** of all participants and their parents/guardians. **Are you aware of this?**

9) According to Federal Trade Commission (FTC) Guidelines¹⁸ and the FTC's "Truth In Advertising,"¹⁹ promotional material—and especially material involving health-related products—cannot mislead consumers, omit important information, or express claims. All of this falls under the rubric of "deceptive advertising" (whereby a company is providing or endorsing a product), whether presented in the form of an ad, on a website, through email, on a poster, or in the mail. For example, statements such as "all students are required to get the Covid-19 vaccine to make the campus safe" or "it's safe and effective" leave out critical information. Critical information includes the facts that Covid-19 injections are unapproved EUA vaccines that "may" or "may not" prevent Covid, won't necessarily make schools/campuses safer, and could in fact cause harm. Not providing links or attachments of the manufacturers' fact sheets and current information on adverse events is omitting safety information. **Are you aware of this?**

10) Since the Covid lockdowns began over one year ago, there have been over 178 reported breaches of unsecured protected health information (PHI), incidents investigated by the Office for Civil Rights (OCR). These breaches exposed millions of people's personal health information. Although many of these incidents were attributed to hacking, some of the breaches to PHI fell directly under the 1996 Health Insurance Portability and Accountability Act (HIPAA), such as sharing a patient's or person's information with an unauthorized individual or incorrectly handling PHI.²⁰ **Can you please explain your obligations to parents/students, under HIPAA law, and how you are going to protect personal information - both with respect to your requirement that students receive these injections?**

11) Whereas pharmaceutical companies that manufacture EUA vaccines have been protected from liability related to injuries or deaths caused by experimental agents since the PREP Act² was enacted in 2005, **companies, schools, and all other institutions or individuals who mandate experimental vaccines on any human being are not protected from liability.** Constructive liability applies to each and every individual involved in the decision-making process to mandate or encourage the use of these experimental vaccines. **Are you aware that you do not enjoy such liability protection?**

12) Are you aware that students or families could file a **civil suit** against you should the student suffer an adverse event, death, or expulsion from school for refusing an EUA Covid-19 injection?

As the legally authorized officer/representative of the school district, college, or university, I have read all of the above information, have provided my students with all of the information that the FDA requires be provided to recipients of the Covid-19 injections, and do hereby agree to assume 100% financial responsibility for covering any and all expenses from adverse events, including death, through insurance coverage or directly. In addition, I affirm that the student shall not be denied access to school should they decline to receive a Covid-19 injection.

_____ Authorized officer of school/institution requiring injection	_____ College/University/School/Institution	_____ Date
_____ Student/Parent/Guardian	_____ College/University/School/Institution	_____ Date
_____ Witness/Parent/Guardian	_____ College/University/School/Institution	_____ Date

Endnotes:

1. Association of American Physicians and Surgeons. Open letter from physicians to universities: allow students back without COVID vaccine mandate. AAPS, Apr. 24, 2021. <https://aapsonline.org/open-letter-from-physicians-to-universities-reverse-covid-vaccine-mandates/>.
2. Congressional Research Service. The PREP Act and COVID-19: Limiting Liability for Medical Countermeasures. Updated Mar. 19, 2021. <https://crsreports.congress.gov/product/pdf/LSB/LSB10443>.
3. Del Bigtree interviews 3 medical professionals incapacitated by Covid injections. *The Highwire*, Apr. 29, 2021. <https://www.bitchute.com/video/A4d8FB2cIBTc/>.
4. America's Frontline Doctors. Vaccines & the law. <https://www.americafrontlinedoctors.org/legal/vaccines-the-law>.
5. Catharine Layton. Forced to get the COVID vaccine? ICAN may be able to help. *The Defender*, Jan. 29, 2021. <https://childrenshealthdefense.org/defender/forced-to-get-covid-vaccine-ican-may-be-able-to-help/>.
6. <https://uscfc.uscourts.gov/sites/default/files/Vaccine%20Attorneys.pdf>.
7. The Solari Report. Family Financial Disclosure Form for Covid-19 Injections. Mar. 1, 2021. <https://pandemic.solari.com/family-financial-disclosure-form-for-covid-19-injections/>.
8. The Solari Report. Form for Employees Whose Employers Are Requiring Covid-19 Injections. May 3, 2021. <https://pandemic.solari.com/form-for-employees-whose-employers-are-requiring-covid-19-injections/>.
9. Centers for Disease Control and Prevention. COVID-19 Vaccine Emergency Use Authorization (EUA) Fact Sheets for Recipients and Caregivers. <https://www.cdc.gov/vaccines/covid-19/eua/index.html>.
10. UK Medical Freedom Alliance. COVID-19 Vaccine Info. <https://www.ukmedfreedom.org/resources/covid-19-vaccine-info>.
11. Vaccine Adverse Event Reporting System. <https://vaers.hhs.gov>.
12. CDC WONDER. About the Vaccine Adverse Event Reporting System (VAERS). <https://wonder.cdc.gov/vaers.html>.
13. National Vaccine Information Center. Search the U.S. Government's VAERS Data. <https://www.medalerts.org/>.
14. U.S. Department of Health and Human Services. Emergency Use Authorization of Medical Products and Related Authorities: Guidance for Industry and Other Stakeholders. January 2017. <https://www.fda.gov/media/97321/download>.

15. 21 U.S. Code § 360bbb-3 - Authorization for medical products for use in emergencies.
<https://www.law.cornell.edu/uscode/text/21/360bbb-3>.
16. Doe #1 v. Rumsfeld, 297 F. Supp. 2d 119 (2003). <https://www.courtlistener.com/opinion/2326816/doe-v-rumsfeld/>.
17. https://www.govregs.com/regulations/expand/title21_chapterI_part50_subpartB_section50.24#regulation_2.
18. Federal Trade Commission. Advertising FAQ's: A Guide for Small Business.
<https://www.ftc.gov/tips-advice/business-center/guidance/advertising-faq-guide-small-business>.
19. Federal Trade Commission. Truth In Advertising. <https://www.ftc.gov/news-events/media-resources/truth-advertising>.
20. U.S. Department of Health and Human Services. Office for Civil Rights. Breach Portal: Notice to the Secretary of HHS Breach of Unsecured Protected Health Information.
https://ocrportal.hhs.gov/ocr/breach/breach_report.jsf?sessionId=618F88DD94EE65D46D5785CB2A643553.

Why Forced Vaccination Is Rape
A Biological and Legal Systems of Systems Analysis and Options for Recourse

Why Forced Vaccination Is Rape
A Biological and Legal Systems of Systems Analysis
with Options for Recourse

Dr. Shiva Ayyadurai, MIT PhD
Systems Biology Group
International Center for Integrative Systems
Cambridge, MA 02138
vashiva@vashiva.com

© Copyright 2020. Dr. Shiva Ayyadurai, MIT PhD.
All Rights Reserved.

SUMMARY

Forced vaccination *is* rape - a conclusion, herein, that is a result of a *systems of systems* analysis that intersects both: (1) a biological systems understanding, which recognizes that pores on the human skin - approximately 5 million - are "orifices"; and, (2) a legal systems understanding wherein rape is defined as "...penetration of *any bodily orifice* by any body part or by any object, against a person's will or without consent, and with threat or actual use of force."¹ This conclusion affords potential victims of forced vaccination the opportunity to employ existing legal remedies such as Harassment Prevention Orders to prohibit forced vaccination - as such action constitutes rape or a threat of rape - commonly known as *rape threat*. To the best of the author's knowledge, the analysis and results herein defining forced vaccination as rape by intersecting both the biological systems understanding of pores on the skin as orifices, and the legal systems definition of rape, are the first of its kind.

INTRODUCTION

The recent "pandemic" of the coronavirus has created an environment for *forced vaccination*. Numerous articles in the popular media have reported plans by governments, employers, and other organizations to deploy forced vaccination. Historically, the handful of previous attempts in the "anti-vaccine" community to equate vaccination with rape have relied on inciting emotion and drama, with the colloquial use of the term "rape" as an "outrageous violation" with nebulous references to medical interventions. Mainstream media and rape advocacy groups have responded by dismissing such attempts as a hyperbole that diminishes the actual gross physical violation that occurs when an individual is sexually assaulted.^{2,3}

¹ Massachusetts Rape Laws, FindLaw, <https://statelaws.findlaw.com/massachusetts-law/massachusetts->

Why Forced Vaccination Is Rape

A Biological and Legal Systems of Systems Analysis and Options for Recourse

This work employs a systems of systems approach intersecting biological systems understanding with legal systems understanding to conclude forced vaccination specifically, not vaccination in general, is rape. The analysis follows this process:

- (1) Presenting a definition of forced vaccination;
- (2) Reviewing the definition of rape as in the dictionary, and then a precise definition from a legal systems understanding of rape pursuant to the laws of the State of Massachusetts;
- (3) Reviewing the biological systems nature of the human skin to reveal that pores of the skin are in fact orifices; and,
- (4) Intersecting the legal and biological systems understanding to demonstrate that forced vaccination is rape.

Solutions are also proposed for potential victims of forced vaccination, based on the analysis herein, by employing existing laws against the threat of rape – also known as *rape threat*. The Harassment Prevention Order, available to citizens of Massachusetts, is proposed as an exemplar solution for preventing forced vaccination.

FORCED VACCINATION

In this discussion, forced vaccination is defined as follows:

Any type of vaccination that an entity such as the State (local, state, or federal), an employer, etc. demands of another individual, who is not consenting to such vaccination as a prerequisite of that individual's continuation of an activity e.g. travel, dining, employment, attending school, etc.

The critical element in the aforementioned definition is that the individual is not consenting to the vaccination as a prerequisite, for continuing such activity.

DEFINITION OF "RAPE"

The Merriam-Webster defines rape as follows⁴:

- 1: unlawful sexual activity and usually sexual intercourse carried out forcibly or under threat of injury against a person's will or with a person who is beneath a certain age or incapable of valid consent because of mental illness, mental deficiency, intoxication, unconsciousness, or deception;
- 2: an outrageous violation;
- 3: an act or instance of robbing or despoiling or carrying away a person by force

Why Forced Vaccination Is Rape

A Biological and Legal Systems of Systems Analysis and Options for Recourse

The first definition of rape in the Merriam-Webster, above, refers to it in the context of trauma and abuse as a result of sexual assault. The first definition is what many of us likely attribute to rape. The second definition is more colloquial, referring to an "outrageous violation," that can be independent of any sexual assault. The third definition refers more to robbery and stealing of personal property or the kidnapping of an individual.

For the purpose of this discussion, we will focus on the first definition in the Merriam-Webster as the basis for exploring the legal systems definition of rape. In this context, according to the laws of the State of Massachusetts, rape is defined as:

"Penetration of *any bodily orifice* by any body part or by any object, against a person's will or without consent, and with threat or actual use of force."⁵

From a legal standpoint, this definition is clear that any bodily orifice that is penetrated without consent, whether it is with the threat or actual use of force, constitutes rape.

SKIN PORES ARE ORIFICES

The skin, a complex system of systems, is one of the largest organs in the human body. The surface of the skin consists of nearly 5 million pores.⁶



Fig. 1 – Skin pores or orifices on skin surface.

Biologically, as show in Fig. 1, the pores are orifices – minute apertures or holes that open into a bodily cavity - which serve to enable transpiration, absorption, and a host of other functions, including the release oils and sweat.⁷

Why Forced Vaccination Is Rape
A Biological and Legal Systems of Systems Analysis and Options for Recourse

The density of skin pores varies based on the type of skin. On average, the density of pores or orifices on the skin surface is 1.5 per mm^2 (square-millimeter); and, the average surface area of a single pore or orifice is 0.11 mm^2 .⁸ Therefore, the total surface area occupied by pore or orifice per square-millimeter is 0.17 mm^2 .

Based on the above calculations, we represent the relative geometry of a 1mm by 1mm area of the skin surface, denoted by the red square in Fig. 2, to the pore or orifice surface area of 0.17 mm^2 as the orange colored square with dimensions of 0.41 mm by 0.41 mm, centered within the red square.

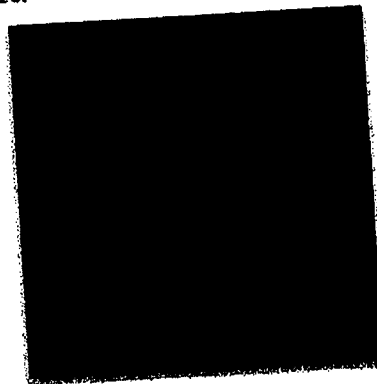


Fig. 2 – Representation of pore surface relative to skin surface.

VACCINE NEEDLE PENETRATION OF SKIN PORE OR ORIFICE

Based on Fig. 2, we calculate the probability of the vaccine needle penetrating the skin pore, partially or in its entirety.

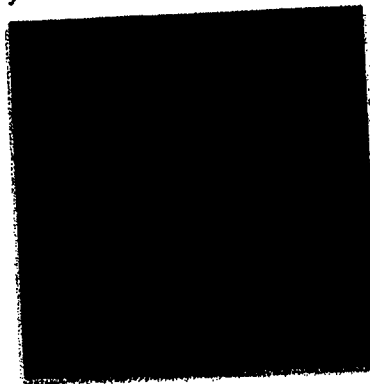


Fig. 3 – Representation of interaction of vaccine needle relative to pore surface.

The diameter of a typical vaccine needle is 0.5 mm. This means that the cross-sectional surface of a typical vaccine needle is approximately 0.2 mm^2 . Using our representation,

Why Forced Vaccination Is Rape
A Biological and Legal Systems of Systems Analysis and Options for Recourse

this would mean the vaccine needle is a square of 0.45 mm by 0.45 mm, as denoted in green in Fig. 3 above. As is observed, regardless of where the vaccine needle is placed, there is a 100% probability that the needle will penetrate the skin pore or orifice, fully or partially.

The above representation, based on the biological data of skin types and needle size, can yield different probabilities of penetration by the vaccine needle into the skin pore or orifice. In such event, we expect that probability of needle penetration to vary. Regardless, this representation provides the first of its kind method to assess probability of needle penetration into the skin pore or orifice.

ANALYSIS RESULTS

Our analysis elicits the following results:

- (1) A definition of forced vaccination;
- (2) The biological systems understanding that the skin pores ARE indeed orifices;
- (3) Relative to the use case of the laws of the State of Massachusetts, documentation that rape is defined as "...penetration of ANY bodily orifice ... by any object, against a person's will or without consent, and with threat or actual use of force;"
- (4) Based on the biological data, size of vaccine needle, and density of skin pores on the skin surface, there is a 100% likelihood that a vaccine needle will penetrate a bodily orifice on the skin, fully or partially; and,
- (5) Pursuant to the definition of rape based on the laws of the State of Massachusetts, if vaccination is performed "...against a person's will or without consent..." such vaccination - a forced vaccination - is rape.

THE PATH FORWARD: OPTIONS FOR RECOURSE

The equivalence of forced vaccination being rape in the aforementioned discussion now allows an individual, who believes they are being victimized by forced vaccination, to exercise existing laws against rape or threat of rape – rape threat – to prevent an impending forced vaccination.

Based on this analysis, recourses to prevent forced vaccination may include direct criminal complaints against a defendant. If the State is demanding forced vaccination, by way of example, the defendants may include the Governor, the Speaker of the House, the Senate President, and the Head of Public Health for the State. Such recourse may also include class action civil lawsuits as well as individual civil lawsuits.

Why Forced Vaccination Is Rape
A Biological and Legal Systems of Systems Analysis and Options for Recourse

is there to protect an individual against someone who is harassing, stalking or sexually assaulting the individual, no matter what the relationship with them might be.⁹

CONCLUSION

Forced vaccination is rape. Individuals who believe they are being victimized by a potential forced vaccination – rape - should exercise their rights by exploring abuse prevention laws against rape and rape threat. The author believes that approaches such as Harassment Prevention Order may be one of the most expeditious ways for an individual, to prevent forced vaccinations. The legal theory on this has yet to be tested; however, the analysis herein provides a logical basis for a legal – criminal or civil - course of action.

⁹ Harassment Prevention Order, Mass.Gov, <https://www.mass.gov/harassment-prevention-orders>, accessed June 17, 2020.

© 2020. Dr. Shiva Ayyadurai, MIT Ph.D. All Rights Reserved. Published June 17, 2020.

6

164

EXHIBIT 2

Clark County School District Affidavit of Maladministration

1 of 7 pages

**Petition with Notice
[Affidavit of Maladministration]
Legal Notice and Warning
Notice to Change of Contract Terms**

**FROM: Bonnie Taylor
2161 Madison Heights Street
Henderson NV 89052**

TO:

**Superintendent of Clark County School District
Dr. Jesus F. Jara
510 West Sahara Ave.
Las Vegas, NV 89146**

**County Health Officer
Dr. Fermin Leguen
280 S Decatur Blvd
Las Vegas, NV 89107**

School Board Trustees (all) of Clark County School District

Linda P. Cavazos

Danielle Ford

Irene A. Cepeda

Lisa Guzman

Evelyn Garcia Morales

Katie Williams

Lola Brooks

Nevada Board of Education

Felicia Ortiz

Dr. Katherine Dockweiler

Mark Newburn

Mike Walker

Dr. Rene Cantu

Wayne Workman

Katie Coombs

Cathy McAdoo

Tim Hughes

Alex Gallegos

CC: Attorney General Aaron Ford

CC: Governors Steve Sisolak

100 N. Carson Street

Grant Sawyer State Office Building

Carson City, NV 89701

555 East Washington Ave., Suite 5100

Las Vegas, NV 89101

CC: Joe Lombardo County Sheriff

400 S. Martin L. King Blvd.

Las Vegas, NV 89106

Affidavit of Maladministration Clark County School District Notice and Demand

Page #1

Clark County School District Affidavit of Maladministration

Notice to Agent is Notice to Principal and Notice to Principal is Notice to Agent

Comes now Affiant **Bonnie Taylor**, one of the People (as seen in the Nevada Constitution Bill of Rights Article 1, Section 1), Sul Juris, in this Court of Record, brings the following claims and facts that you and your agents, serving as elected servants and trustees of the People, must provide due care and remember your oath which binds you:

Nevada Constitution Article 15 Section 2: "Oath of office"

"Members of the legislature, and all officers, executive, judicial and ministerial, shall, before they enter upon the duties of their respective offices, take and subscribe to the following oath: I, _____, do solemnly swear (or affirm) that I will support, protect and defend the constitution and government of the United States, and the constitution and government of the State of Nevada, against all enemies, whether domestic or foreign, and that I will bear true faith, allegiance and loyalty to the same, any ordinance, resolution or law of any state notwithstanding, and that I will well and faithfully perform all the duties of the office of _____, on which I am about to enter; (if an oath) so help me God; (if an affirmation) under the pains and penalties of perjury".

Equality and Rights of Men

Clark County School Board Trustees, The Nevada Board of Education and the Governor are not allowing the students, staff, teachers and volunteers to live freely by requiring masks, social distancing and vaccines. **See Reference below:**

Nevada Constitution, Article 1 Section 1. Inalienable rights.

"All men are by Nature free and equal and have certain Inalienable rights among which are those of enjoying and defending life and liberty; Acquiring, Possessing and Protecting property and pursuing and obtaining safety and happiness."

People are the Source of Power

Clark County School Board Trustees, the Nevada Board of Education and the Governor work for We The People. All political power is inherent in The People. Affiant comes as one of the People from which your power is derived. Your oath affirms that your main purpose is to protect and maintain my individual rights. This includes the rights of my heritage, those in my care, my children. Affidavit is being given as notice to those that are creating or enforcing rules and mandates such as social distancing, mask wearing or vaccines. You are infringing on the freedoms guaranteed to the People. You are also practicing health discrimination and segregation and are depriving People of their rights under color of law. **See Reference below:**

Clark County School District Affidavit of Maladministration

Nevada Constitution Article 1 Section 2: "Purpose of government; paramount allegiance to United States"

"All political power is inherent in the people. Government is instituted for the protection, security and benefit of the People; and they have the right to alter or reform the same whenever the public good may require it."

US Constitution (Supreme Law of the Land) Amendment 14 Section 1.

"All persons born or naturalized in the United States, and subject to the jurisdiction thereof, are citizens of the United States and of the state wherein they reside. No state shall make or enforce any law which shall abridge the privileges or immunities of citizens of the United States; nor shall any state deprive any person of life, liberty, or property, without due process of law; nor deny to any person within its jurisdiction the equal protection of the laws."

Government Instituted for the Common Benefit and The People to Instruct their Representatives

Furthermore, Nevada Constitution Article 1, Section 4, The liberty of conscience hereby secured, shall not be construed, as to excuse acts of licentiousness or justify practices inconsistent with the peace or safety of this State. Article 1, Section 10, The people shall have the right freely to assemble to consult for the common good, to instruct their representatives and to petition the Legislature for redress of Grievances.

You as state personnel, are subject to having your actions restricted if your actions are not consistent with protecting the People's freedom. Any failure on your part to protect these rights is a breach of your trust indenture, granted by the People, and will be considered an act of maladministration, and an attack on the People you serve.

A system of vaccination and/or masking has been created and the People are being threatened to participate or lose the freedoms guaranteed to us and our children. Affiant affirms that any rebates, intimidation, manipulation or grooming of children to participate in activities regarding a minor's health, including staying away from friends, obstruction of airway due to mask wearing, staying at home for prolonged periods, or vaccination without full disclosure of risks and written, signed consent of the parents are unlawful. The men and women creating and adopting any such policies shall be fully liable to the extent of the law for every health concern arising out of the above-mentioned violations of rights and 'mandated' health care policies.

Affiant demands that the School Board cease and desist immediately from any policies that mandate forced mask wearing, social distancing, and/or experimental vaccination and/or

Clark County School District Affidavit of Maladministration

proof as condition for free and equal participation in education, or as a means to discriminate against or segregate children.

Vaccine companies are exempt from any and all liability that may arise from vaccine injury or death, but men and women who coerce or convince or administer vaccines, are not shielded from such liability. Emergency Use Authorization (EUA) for experimental vaccines, such as every single COVID-19 vaccine, are exempt from liability according to the National Childhood Vaccine Injury Act (NCVIA) and the National Vaccine Injury Compensation Program (NVICP). This was the impetus from the creation of the 2005 PREP Act. The PREP Act notes certain "covered individuals"; healthcare practitioners who administer the vaccines for example. However, I find nothing in the PREP Act that would make immune school districts, schools, or their trustees and boards, employers, businesses, sports teams, or county commissioners and other politicians.

If you believe you have the power granted to you by the Nevada Constitution to ignore these demands, please reply within 5 calendar days with the Constitutional provisions that gives you such authority. If you fail to respond with the Constitutional provisions giving you the authority to refuse the will of the People, you agree by acquiescence that you are doing acts which conflict with this notice with malice, and are knowingly and willfully ignoring the trust indenture you swore to uphold.

Legal Notice and Warning

Federal law provides that it is a crime to violate the Constitutional Rights of a citizen under the Color of Law. You can be arrested for this crime and you can also be held personally liable for civil damages. Attempting to coerce or deceive a citizen to surrender their Constitutional Rights is a Federal Crime. Federal Courts have found that your ignorance of the law is no excuse.

18 USC §242 provides that Whoever, under color of any law, statute, ordinance, regulation, or custom, willfully subjects any person in any State, Territory, Commonwealth, Possession, or District to the deprivation of any rights, privileges, or immunities secured or protected by the Constitution or laws of the United States... shall be fined under this title or imprisoned not more than ten years, or both; and if death results from the acts committed in violation of this section or if such acts include kidnapping or an attempt to kidnap, aggravated sexual abuse, or an attempt to commit aggravated sexual abuse, or an attempt to kill, shall be fined under this title, or imprisoned for any term of years or for life, or both, or may be sentenced to death.

18 USC 245 provided that Whoever, whether or not acting under color of law, intimidates or interferes with, participating in or enjoying any benefit, service, privilege, program, facility, or activity provided or administered by the United States; applying for or enjoying employment, or any perquisite thereof, by any agency of the United States; shall be fined under this title, or imprisoned not more than ten years, or both; and if death results from the acts committed in

Affidavit of Maladministration Clark County School District Notice and Demand

Clark County School District Affidavit of Maladministration

violation of this section or if such acts include kidnapping or an attempt to kidnap, aggravated sexual abuse or an attempt to commit aggravated sexual abuse, or an attempt to kill, shall be fined under this title or imprisoned for any term of years or for life, or both, or may be sentenced to death.

42 USC §1983 provides that every person who, under color of any statute, ordinance, regulation, custom, or usage, of any State or Territory or the District of Columbia, subjects, or causes to be subjected, any citizen of the United States or other person within the jurisdiction thereof to the deprivation of any rights, privileges, or immunities secured by the Constitution and laws, shall be liable to the party injured in an action at law, suit inequity, or other proper proceeding for redress.

Encouraging vaccination by providing for and allowing any temporary vaccine facility on a school campus, which implies to the People that such a health care choice and experiment is encouraged by the school, is a conflict of interest of the school, or an incentive and manipulation designed to obtain more federal funds (see Title 18 USC 1038/1040). Many vaccination facilities exist with ease of access for families. There is no reason to set up vaccination clinics in or around areas with children who are unaccompanied by their parents.

WARNING: you may be in violation of Federal Law and persisting with your behavior may lead to your arrest and/or civil damages. Also understand that the law provides that you can be held personally responsible and liable, as well as your company or agency. You are advised to cease and desist with your policies and to seek personal legal counsel if you do not understand the law.

Please take further notice that the only reason that the People have power to bring forth a petition is because the government is created to carry out the People's will and when government is functioning in a way that goes against the People's will and authority, the People are to correct the government's behavior and lead them in ways consistent with the Constitution and demand a redress of grievances.

It is therefore hereby the will of Affiant, Order and Demand that this school board policies cease and desist from the following unconstitutional policies and behaviors that infringe on individual rights:

1. Any and all forced mask wearing policies and rules
2. Covid 19 vaccination requirements incentives or coercion
3. Social distancing rules
4. Holding school board meetings by zoom or in restricted conditions limiting our ability to request a redress of grievances utilizing the excuse of 'emergency'
5. Segregation and discrimination of children based on health care choice
6. Forbidding or restricting any man, woman or child free access to public spaces due to unconstitutional policies citing 'health'

Affidavit of Maladministration Clark County School District Notice and Demand

Clark County School District Affidavit of Maladministration

7. Manipulation of children through pressure to follow health recommendations which may conflict with religious belief, parental preference or medical conditions
8. Criminal coercion of any man, woman or child to participate in medical experiments through threat of violating privacy, public shaming, forcing documented proof of vaccination, withholding services from any of the People for noncompliance
9. Forcing children with disability to be sequestered at home for not following arbitrary and unconstitutional health care rules
10. Allowing vaccination clinics on or around school grounds where unaccompanied children are present

This affidavit is a Contract, and if you shall ignore this Affidavit by not responding by the following terms, you agree to pay \$1000 per day until our complaints have been resolved. If you, as an elected government official believe that these claims are untrue, please respond within 5 days with Constitutional Provisions, sworn under penalty of perjury, by Affidavit, point by point, showing where you have Constitutional Authority to ignore these rights of the people. If you do not respond within 5 days, you agree, by acquiescence, that you are knowingly interfering with the rights of one of the People you swore to protect and that this Affidavit shall stand as evidence that you are acting in Maladministration and that no court shall have the power to again adjudicate these matters and that all Courts of Record shall accept this Affidavit as truth and law. You also agree to be bound by all said herein and the Affiant is able to bring this Contract before an Arbitrator of Affiant's choice and you agree to be bound by any reward.

By the power of one of the people, and the power declared in the above constitutional provision, I Bonnie Taylor demand, require and order a complete removal of the mask mandate, vaccine mandate and/or forced treatments or interactions relating to the students, teachers, staff, and volunteers immediately. As seen above, all rights that were set forth in the above section are self-executing, and since you are being given that this is demanded.

Clark County School District Affidavit of Maladministration

VERIFICATION

I hereby declare, certify and state, pursuant to the penalties of perjury under the laws of the United States of America, and by the provisions of 28 USC 1746, that all of the foregoing representations are true and correct to the best of my knowledge, information and belief.

Executed in Henderson, Nevada, on this 10th day of August in the Year of our Lord Two thousand and Twenty One.

Autograph of Affiant: Bonnie Taylor

Notary as JURAT CERTIFICATE

Nevada State }

Clark County }

On this 10 day of August, 2021 (date) before me,

Robin Crandall, a Notary Public, personally appeared

Bonnie Taylor Name of Affiant, who proved to me on the basis of satisfactory evidence to be the man/woman whose name is subscribed to the within Instrument and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her autograph(s) on the Instrument the man/woman executed this instrument.

I certify under PENALTY of PERJURY under the lawful laws of Nevada State that the foregoing paragraph is true and correct.

WITNESS my hand and official seal. Signature of Notary / Jurat

Seal:

